

10-799-747

EP 0 679 716 A1

CLONE:HUMGS01111

SEQUENCE DESCRIPTION:

5 GATCACGTGG GTGTCAGTAT CTTTAACGGC CTTTATTCTT GGTGTNAGA TTTTATTGA 60  
TATGCCCCACT CACCCTCGAC GAATCTGCCC GCTTTGGGCT GTGGTGCCTG TGTATCTTTG 120  
CCCGTCTGGT CTCCAGTTGG TGGAAATNACC TTTTGTGAC TGCCACTTCT CAGCATCTTT 180  
NAAATTTGAC ATAATGTTGC TTCATTTCAG TTTTAAAGT TCTGTAATTT GTTGATTGTA 240  
TTTAACTATG TNAGTTCTGT TGTNATGTTT ACTGTATTGT AAAGCACCTC ATTCATGTNA 300  
10 TGAGTGCTCT ATAAATCAAT AAATGATGAC TTAGAGGGCT GTAAA 345

SEQ ID NO:980

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01112

SEQUENCE DESCRIPTION:

20 GATCTGCTTG GNGTTTTCTN CCCCCACCC CAAACTTCTG TCGAGGAGCA AGGCTTGCCA 60  
GCAAGTCAGA AGGATTTGAA CCGAGCAGCC AATCTTTCCA GCCCTCCNT ACCGACCTCT 120  
GTCTGGAGAC GCAGCAGCCT GTGTCTCCA GGGCCTCTGG TTTGTNGTAT TATAGTATAT 180  
TTNGCTGTGG AAAATGTCAC GTTATGTCAC CTTGGAGCCA CTCACCTGGT CCTGTTGTTT 240  
TANCCCATCC CTTCTNTNGN GGGCTATTGA TTINTTCTNA GGAGAGTACA NCGTCACTAT 300  
25 TGTAGNGTAA CCCTGTACTC AATATTACCA TAGNCGNTG NCGN 344

SEQ ID NO:981

SEQUENCE LENGTH:357

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS01115

SEQUENCE DESCRIPTION:

35 GATCAGAAAC CAACCATGAA TGAACCCCTG GCTCCTTCAC CACCCACAG ATTGGTATGA 60  
TGCTGCCGGC ACAGNTGGGA TACACAGGC TCCCCAGGC CTGAGCTGCT TCACTAGGGA 120  
ATCTGCCAC CACCCTGTCT TCCTCTGCAA GTGCTCAGGG AAATGGCCTT NCCGCCGGAG 180  
NCATNCTATC TGNCTGACAG GCTGTGACTC TTCTCTAAC CTTGGCCTTC TCCCCTCTTC 240  
TGAGCTAGTT GGTGAATNN NNGTTAATGC TTAAGATTTG TTTTCTCTT TTCACAGCAA 300  
40 CATTTTCTTG AATTTTTTTC TGCACAGCTT TTCCAAAATA AAAACCTTCC AAACAAA 357

SEQ ID NO:982

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS01116

SEQUENCE DESCRIPTION:

50 GATCAGAAAT AAGATTGACT TGGGTGTTAT ATTTATCTC TCTCCAGACT CTAGGTATAT 60  
TTCCAACTTT ATATATCACA GTATTTAAAA AGACATGTTT GCATTGAGAA ATTAACCCTA 120  
AAGGGTTTTT AATAGGGTGT AGACCTCCAG TACCTTTGTA ACTAAAGTCT GTCTAGTCAT 180  
NGTAAATATT TATCTGTGAG TTTTGACAGA TTGGGGCCAG CTTGATGTTT TAAATCTTCA 240

CCCCGGTATG AAAACTTAAA GGTATATATT CANTTTTTTA CCATTTTATG GAAAATATTT 300  
 AAAATCTGTT TTTACAGGGT TTTTTTTTTT TTTTTTTTTN 340

SEQ ID NO:983  
 SEQUENCE LENGTH:340  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01117

SEQUENCE DESCRIPTION:  
 GATCTGGTTC GGCTGCTGTC GGATGAGGAC GTAGCGCTCA TGGTGCGGCA GGCTCGTGGC 60  
 CTCCTCTCCC AGAAGCGCCT CTTCCCTGG AAGCTGCACA TCACGCAGAA GGACAACCTAC 120  
 AGGGTCTACA ACACGATGCC ATGAGCTGAC GGTGTCCCTG GAGCAGTGAG GGGACACCAG 180  
 CAAAAACCTT CAGCTCTCAG AGGAGATTGG GACCAGGAAA ACCTGGGAGG ATGGGCAGAC 240  
 TTCCTGTINT TGAGGCTAAT GGACCCGTGG GGCTTGAAT CTGTCTCTTT CTACTATTTA 300  
 CATCTGATTT AAATAAACCA TTCCATCTGA AAGGGGCAAA 340

SEQ ID NO:984  
 SEQUENCE LENGTH:339  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01118

SEQUENCE DESCRIPTION:  
 GATCTATGTA TTATTAGAAA AATGAAGTAT TTCTGACATG GAACAAAGAA AGTGAAAAC 60  
 GGTACTTAAT GGGGGAAGCA AAATTAGCTG GGAATAAAC GGACATGTTT TGTTTTGTGA 120  
 ATTCTACCTA AATGTCTCTC TATCCACAGA GAACTAGTA TTACTTGAAG ATGTGAAAGT 180  
 TCCTGTGGTA GCCATACCTT GAAGCACAGT GTTGTACAT AAGTAAATAT CTTGATTCTA 240  
 AATTAATCC AGATTATCT AATATATATN ATTNATATC TTTGTTGTAT TAAANTGGTT 300  
 TAATANTCAC TANAANTANN ACATTTTGN TGTGGAAA 339

SEQ ID NO:985  
 SEQUENCE LENGTH:339  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01119

SEQUENCE DESCRIPTION:  
 GATCTCAGGA ATTTTGTAG GGGATTGAAG CCAGANCTAG TTGCGTCCA GGGACCAAGA 60  
 GAAAGAAGCA GATATCCAAA GGGTGCAGCC CTTTTGAAA GGGGTGTTA CGAGCAGCTG 120  
 TGAGTNAGGG GACAAGGGG AGGTCCAGG AGCCACACAC TCCCTTCCTC ACTTTGGACT 180  
 GCTGCTCTN TTAGCTCCTC TGCCTCTGAA AAGCTGCTG GGGTTTTNA TTTATAAAC 240  
 CTCTCCCCAC CCNCCACCN CCACTTCCT GGGTTTTCTC ATTGTCTTT TGCATCAGTA 300  
 CTTGTATTG GGATATTAAG GAGATTTAAC TTGGGTAAG 339

SEQ ID NO:986  
 SEQUENCE LENGTH:339  
 SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS01120

SEQUENCE DESCRIPTION:

5 GATCCTTTCC GACACACATG TCTGAAGACT TATTTTCAAA GNCAGCACAT TTTTGGAAAC 60  
 TAATCTCTTT TCCGTAATAT TTCCTTTATT TCAATGATTC TCAGAAGGCC AATTCAAACA 120  
 AACCACATT TAAGGTTCTT TAGGATTATA GAATAAATTG GCTTCTGAGT GTTAGCTCAG 180  
 TGAGCTAGGA AAGCACCAAT CGATATTTGT TTCCTTTAGG GATACTTTGT TCTCACCCT 240  
 GTCCCTATGT CATCAAAATTT GGGAGAGATT TTTTAAATA CCACAATCAT TTGAAGAAAT 300  
 10 GTATAAATAA ANTCTACTTT GAGGACTTTA CCAAGTAAA 339

SEQ ID NO:987

SEQUENCE LENGTH:337

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01122

SEQUENCE DESCRIPTION:

20 GATCCAAAGT GTTAAAAATG CTGAAGTCAT GTCAAGTACT GTCTGGAGGG TTTTTTTAAG 60  
 AAAAGGCATT TGGCATTAA CTGTCTCTTG TTTTATTTT AAGTTTTTGG AAACCTTTTG 120  
 ACATAAAATG CTGCCAAGTA TCTAAGAAAT GTATATACTG ACAGAAGATA TTTGAAAGTG 180  
 GAAAATTGGA AATGAAATAT GTTGCTGGGN GCGTTAATCA CCTCCGCCCA GGATTAGTC 240  
 ACTTGCAGGA CCTCTTTATA GTCTAGGATG GCAGAGCAGA AGATTTTAAT ATGCTTTTAT 300  
 25 TAAGTGATGT AAAATAAATG CTTTTGGAT TATCAAA 337

SEQ ID NO:988

SEQUENCE LENGTH:371

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01123

SEQUENCE DESCRIPTION:

35 GATCGGCCAG CCCCCACCTA CAGCAACATG GAGGAGGTGG ATTAGCAGGT CCCTGGCTGA 60  
 TGGGGGGGAC TGGGTTTGGG ACACCCACAC AGNGGGCCAG CTCCTTGCCG CTTCTCCTTC 120  
 TCTAACCAG AGGACACTGG CTCTGTCACT GGGAAAGCTGA GGGGTATGAT TTGGGTGTGG 180  
 AGACCTCTCA GGTGGGACT TCTTGTGAGC TTGGACCCCT GACCAGTGGG CTTTGGCTTC 240  
 TCCAGCCGCC TCCAGTGCTG CGTGATTGA TTCTGTTGTA CCTTCAATTC TTCTGACCCG 300  
 CATTATAAAC ATTATAATTN NATTTAAAA ATTGTAATTT TTTTGGCAAT TTTGGAAGTG 360  
 40 ACTGCTGCTG N 371

SEQ ID NO:989

SEQUENCE LENGTH:334

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01126

SEQUENCE DESCRIPTION:

50 GATCTTCTTT ATATTCTACT TGAGTGCTGT CTCCATGTTG ATGTATCTNA GCAGGTTGTC 60  
 CACAGGTAGT CTAGGAGGGT GGCAACTTAG AGGTGGGGAG AGAGATTCTC TTATCCAACA 120

55

TCAACATCTT GGCAGATTG ACTCTCAATC TCTTCACTAA AGTTGTTAAG NTCNNCCGGT 180  
 GATAAGTACT TCAATTTCAA CTTGTAGNNT GGGGAAATTT AGAATTATGC AGNTTATGGA 240  
 5 ATGTGTATATG ATGACATTTG CAATAGGTCT ATTCTCTATC ATTGTAAGAA GNTGTGTGTA 300  
 CTGGTATTG NCCCAAGTAA TAANCTAACT GAAA 334

SEQ ID NO:990

SEQUENCE LENGTH:333

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01127

SEQUENCE DESCRIPTION:

15 GATCTGNCGT GCCCACCAC TGGTGATGGA AGGTTACAAG TGGCACTTCA ATGAGACGGT 60  
 GCTCACTGTG TGGTCGGCAC CCAACNACTG CTACCGCTGT GGGCGTGTGG CAGCCATCTT 120  
 GGAGCTGGAC GCGCATCTCC AGAAAGATTT CATCATCTTT NAGGCTGCTC CCCAAGAGAC 180  
 ACGGGGCATC CCTCCAAGA AGCCCGTGGC CGACTACTTC CTGTGACCCC GCGCGGCCCC 240  
 TGCCNNTTNC AACCCCTTCTG GCCCTCGCAC CACTGTGACT CTGNCATCTT CCTNAGACGN 300  
 20 AGGNTGGGCG TGGGNGGGNN TGTNCTGGNT NTN 333

SEQ ID NO:991

SEQUENCE LENGTH:329

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01128

SEQUENCE DESCRIPTION:

30 GATCGGACTG AACAGGAATC CTCGGGGGGT GAACAGCCAT TCCTTCGTGA CCTGTGCACG 60  
 NCTTCTGCAA CCCTGGAGCT CTGCTCGGCT AGTCTGACTC GAAAAGGGCG TGAACAAGC 120  
 TGACGGGACT CCAGTAGGGA CTTTGAGAGC ACATTTTGTA AAAATATTTA TCTAGACGCA 180  
 AATGCTTATC CATGAATGTC CTCTTAGACC ATTTGGGGAT GAAGCCATCT TAATAATTAG 240  
 TAATAATTAA TTAGTAATAA TTAGTAAGCA TTTCTCAAT GCTCTGATTC CATCATGTTT 300  
 35 TCTTAACATG ATAACCTAAA AAATTGAAA 329

SEQ ID NO:992

SEQUENCE LENGTH:332

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01129

SEQUENCE DESCRIPTION:

45 GATCCTCCTC AGAAACTACC GGACTTGTTT TCTGTATTGG TGTGTTTTGT ATCTTGCTTG 60  
 AACTTCCTGT TCTTCTTGGT ATACTTTAAC ATTATNATNA TGTGGGATTC CAAAAGTGGA 120  
 AGAAATCAGA AGAAATCAG CTAGCTGTAT TCCTAAACAA ATTGTTTCCT AAACAAATGT 180  
 GAAAATGTGA ACAGTGCTGA AAGGTTTTGT GAACTTTTTG CTATGTATAA NTGAAATTAC 240  
 CATTTTGAGA ACCATGGAAC CACAGGAAAG GAAATGGTGA AAAGTCATTG TTGTCTACAC 300  
 50 AAAATAAATG TATATGGAGA CCAAAGACCA AA 332

SEQ ID NO:993

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01130

SEQUENCE DESCRIPTION:

GATCAAGAAA TCAGGATGGC CATTTATTTA ATATCCATTC ATTTCATGTT AGTGGGACTA 60  
 TTAACCTGTC ACCAAGCAGG ACTCTATTTT AAACAAAATT TAAACTGTT TGTGGCCTAT 120  
 ATGTGTTTAA TCCTGGTTAA AGATAAGCT TCATAATGCT GTTTTTATTC AACACATTAA 180  
 CCAGCTGTAA AACACAGACC TTTATCANGA GTNGGCAAAG TTTCCAGGN TTCATATACA 240  
 GNTAGGCTAT NNGNCATGTA TTTTGAAACG CAGTGTTNCA TNATGAAAGN GCTCTCAAGT 300  
 NGCTTNAAG NTANTTTATT AAANGGGTNN 330

SEQ ID NO:994

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01131

SEQUENCE DESCRIPTION:

GATCCGGGCC TTGCGTGCAG CCTCCCAACC ATGGGCTGGG TTNGTGCTT ACTGTATGTT 60  
 GGCAGCTTGG NNAGGGCAGG AGACGCAGCG TGGAGCCTAC CTCCCACAT TCACGCTTCG 120  
 CCCACGNTGC TCCGACTGGC TGCAGCGGAC ACTGCCCAA GCAGAGGGGA GTCTCAGTGT 180  
 CCTGCNAGCC AGCCGAACAC TTCTCTCCGG AAGNAGGCTG GTTCGACTGT NAGGTGTTGA 240  
 CTAACCTGTT TCTCTGACTC GCCCANAGGT CGTGGCTAAA GGCACCTAGG CGNCTTAAAT 300  
 TTGTAATAA AATGTTACTA CGGTTTTAAA 330

SEQ ID NO:995

SEQUENCE LENGTH:338

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01132

SEQUENCE DESCRIPTION:

GATCTGAATG ATGATGGAAA CATGCAGACA GCCTCTCAGT CTTACTATTT AATGTTGTAG 60  
 CTGGGAAAAA ACCCAGAGAG GTTAACTGAT ATACTGGGTT GGGACTAGGA TGTGGGTTTT 120  
 GTNACTCTNA ATCCCATGTC CTCAAACCTAC GCTGCCTTCC GAAGTCTGGC ATTTGTNAGC 180  
 TCATGCTTCC TTGTAGTCCA GCTTCTTATG TGCCTGTAAT ATTCTCCAGT ANGATTGTAA 240  
 GCCCCTTAAG GGCAGGGACG TCTTNCATC TCTAGCACTG CTATAGTGT CTATCCTTAG 300  
 TTATGGACCT AGATAAATAA NTNGGTGGTG GCAACAAA 338

SEQ ID NO:996

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01133

SEQUENCE DESCRIPTION:

GATCTTTATA TTNATACTC TAAANTCGTA CAAGCCAATC TNCATTTCNA CTAGTGGA 60

CTGTATAGCT GGTCACTTT CCAGGACCCT TTTATCAAGA AACAATGCAG CTTCTACATT 120  
 TGTNCTGCTT CTACACAAA ACAGCTGGAA TGTATATNGT ATGGTTCTGG ATGCTCTTGT 180  
 ATACCTNACT CTTCAATTCT NACCTAACC ATGTGCTATG ATTTGAATGT TTCTCCCCTG 240  
 CAAAACATCAT GTTGAAATGT AATTGCCATG NTAACAGTAT TANTAGGTGG NNTATTTNAG 300  
 NGGTGNTTAG GGTGGGATTG GTGNTGTN 328

SEQ ID NO:997

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01134

SEQUENCE DESCRIPTION:

GATCTTGTGT CTTAGAGAAG CCCCCATACC TGGTAGAGCA TGTACCATCT TACATGCTTA 60  
 AATAACTCCA CATTATTTTG TGTATATNAC TCTGTGTTAT AAATATACAT TTGTNGGTCT 120  
 CTCTCTTGGA TTATTTTGTG TCTTTGTCCT GTAACCTACCA CTGAAAGGGT GCAATACAGC 180  
 TTCTTTGAAA TGTGTATTGA ACGGATGAAT GTATAAATAA AANTTAAATT TTGTAAATTT 240  
 CTGCTTATNC TTAGAAAAAG AATCTAAATN GTGACAAATC AGAATTGAAA AANGTATTCT 300  
 AATAAAGANA AACANGCTTT TATAAA 326

SEQ ID NO:998

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01135

SEQUENCE DESCRIPTION:

GATCCCCAGT GTTGGAGGTG GGACCTAAGT GGCAGGTGTT TGGGNCATGG GGATGGATTG 60  
 CTCACAAACG GCTCGGTGGC CTCCTGCGAG TAACGAGTGA GTTCACACAC TATTAGCTCA 120  
 CATGAAACCT GGTATTATAA GAGTCTGGGA CCTCCCTCCA TGCTCTCTCT CTTGCTCCTT 180  
 TCTCTACCA CATCACACGT GGCTCCCTTT GCCTTCTGCC ATGAGTGAAA GCTTCTGAG 240  
 GGCTCACCA GACACAGATG CTGGTGTGAT GCTTTTTGTA CAGTCTGCAG AACCCCGAGT 300  
 CAAATAAACC TCTTTTCTTT ATAAA 325

SEQ ID NO:999

SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01136

SEQUENCE DESCRIPTION:

GATCACTTTC AATTGAAGTC AGGGTATTGT GCATAATAGA AAGTATTGGA CTGAGATATT 60  
 TGGTTACCAT GGAGGCCAAT GCTTTTTTCA TCTTATTAAA TGTGATGTGA CTTTTTNCCT 120  
 TGTACAGAAG AGTACTGTAT TTTTGAATAG CCTACTCCCA AGTAAGAGCA AATCTGTATG 180  
 ATAACATTTT TNCCNCTGGA CATAAGACAT AACAGTAACA CGATGTACAT TTACAAGCGG 240  
 CCTTATGTAC ATTTCCCAAC ANTCTTTTGA AGGCCAAATT GTGACCATAT GTGTATAATT 300  
 AAAATCGTTT TTAATCCNTA AA 322

SEQ ID NO:1000

SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01137

SEQUENCE DESCRIPTION:

GATCTTAGAA ACCTCTGCAC AGAAGCTGCT TTGCTGGCTC TGCAAGAAAA TGGACTAGAC 60  
 GCAACTACAG TNAACAAGA GCACCTTTCTA AAATCACTTA AGACTGTAAA ACCGTCGTTA 120  
 AGTTGCAAGG ACTTGGCTTT ATATGAAANC TTATTTAAGA AAGANGGATT TTCTAACGTG 180  
 GAAGGTATTT AAAANTCACC TTAAACTCTT GTNCAGTTCA CATTAAATTGA AATGTGAACT 240  
 TGCCTGTCGT TTGCAACTTC ACACCTTTAG AATTGTGTT TATATTCCT GTANGTGAAT 300  
 AAATANANCA NNNCAGNNCA AA 322

SEQ ID NO:1001

SEQUENCE LENGTH:353

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01138

SEQUENCE DESCRIPTION:

GATCTCAGAA CAACCTTTCT TGTAGTAAC ATATTTTGG CAATACATAN CAACCTGGGC 60  
 CTGGTGGATA ACCAACAAGA TGGGGAAGAA AAGNATTGAG AACTTTAAGA GTGGTGTGGA 120  
 TGCAGACTCT TCTTATTNA AAATCTTTAA GACAAAACAT GACTGAAAAG AGCACCTGTA 180  
 CTTTTCAAGC CACTGGAGGG AGAAATGGAA AACATGAAAA CAGCAATCTT CTTATGCTTC 240  
 TGAATAATCA AAGACTAATT TGTGATTTTA CTTTTTAATA GATATGACTT TGCTTCCAAC 300  
 ATGGAATGAA ATAAAAATA AATAATAAAA GATTGCCATG GANTCTTTGC AAA 353

SEQ ID NO:1002

SEQUENCE LENGTH:320

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01139

SEQUENCE DESCRIPTION:

GATCTGACCT GGTGAGATTA TTTCTGATGA CCTCATCAA AAATAACAA TTCCCAATGT 60  
 TCCAGGTGAG GGCCTTGAAA GGCCTTCCAA ACAGCTCCGT CGCCCTAGC AACTCCACCA 120  
 TTGGGCACTG CCATGCAGAG ACGTGGCTGG CCCAGAATGG CCTGTTGCCA TAGCAACTGG 180  
 AGGCGATGGG GCAGTNAACA GANTAACAAC AGCAACAATG CCTTTGCAGG CAGCCTGCTC 240  
 CCCTGAGCGC TGGGCTGGTN ATGGCCGTTG GACTCTGTNA GATGGAGAGC CAATCTNACA 300  
 TTCANGTNTT CACCAACCN 320

SEQ ID NO:1003

SEQUENCE LENGTH:318

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01140

SEQUENCE DESCRIPTION:

GATCCTNCNA GTTAGCCTAG TACTGCTGTA CTGGCCTGTA TGTACATGGG GTCCTTCAAC 60  
 TGAGGCCTTG CAAGTNAAGC TGGCTGTGCC ATGTTTGTAG ATGGGGCAGA GNCATCTAGA 120  
 ACAATGGGAA ACTTAGCTAT TTATATTAGG TACAGCTATT AAAACAAGGT AGGAATGAGG 180  
 CTAGACCTTT AACTTCCCTA AGGCATACTT TTCTAGCTAC CTTCTGCCCT GTGTCTGGCA 240  
 CCTACATCCT TGATGATTGT CCTCTTACCC ATTCTGGAAT TTTTTTTTNN GNNGATANNT 300  
 ACAGAAAGCA TTTTGAAG 318

SEQ ID NO:1004  
 SEQUENCE LENGTH:320  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01141

## SEQUENCE DESCRIPTION:

GATCTTTCTG TCTTCTGGGT TCCATTTTTN AAATGTTTAA AAATATGTTG ACATGGTAGT 60  
 TCAGTTCTTA ACCAATGACT TGGGGATGAT GCAAACAATT ACTGTCGTTG GGATTTAGAG 120  
 TGTATTAGTC ACGCATGTAT GGGGAAGTAG TCTCGGGTAT GCTGTTGTGA AATTGAAACT 180  
 GTAAAAGTAG ATGGTTGAAA GTACTGGTAT TGTGCTCTG TATGGTAAGA NCTAATTCTG 240  
 TNNCGCCATG GTNCATAATT NCCTATNCAC CTTNCCTNCC CTTTNCAGC CCAATTAAAG 300  
 GTTGGGGTCN TAACCTCAAA 320

SEQ ID NO:1005  
 SEQUENCE LENGTH:315  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01142

## SEQUENCE DESCRIPTION:

GATCTGGGGG CTCGAGACTC TGAAGGCAGG GACCCTCTGA CCATCGCCAT GGAACAGCC 60  
 AACGCTGACA TCGTCACCCT GCTACGACTG GCAAAGATGA GGGAGGCTGA AGCGGCCAG 120  
 GGGCAGGCAG GAGATGAGAC GTATCTTGAC ATCTTCCGCG ACTTCTCCCT CATGGCGTCA 180  
 GACGACCCGG AGAAGCTGAG CCGTCGNAGT CATGACCTCC ACACGCTGTN ACCCGAGGCC 240  
 CACGGGGCCG CGCCTGCNTC CCTTCCCCGN NACCGNGCNN TCTGCCATTA AAGCCTCCGT 300  
 GCTTCGNTCT TCAAA 315

SEQ ID NO:1006  
 SEQUENCE LENGTH:315  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01143

## SEQUENCE DESCRIPTION:

GATCCCTTGC NTGCCCTCC CTGTGGCAGG GCTAACTGCC TGGCCCTCCT GGCTCGCAGC 60  
 CAGCCAGNCC CCTGGCAGCA GGTTCCTCTC AGGGCTTGGN TCTTCAACCT GTGGCGACAG 120  
 GAGGCAGGGC AGACTGTGGA GGACAGGATG CAGGTCAGGG AGAGGGAAAG CAGGGGTGGA 180  
 CCGCCATGAG CATGAAAAGC CCGAAGCAAG TTGACTCTTN AATTGCAAC TGTATGNTC 240  
 TGAAAATGAG AACGATGTAT CAANTTGATG CANTTTNGAT GTTGTACTTA CAATAANGTT 300  
 TTAATGTGTN TTAAA 315

SEQ ID NO:1007

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01144

SEQUENCE DESCRIPTION:

GATCTGAGGN CAGGANTTAA ACCACAGAAT GTATNTGCCT GTAAAGCACA GGGGAAGAAA 60  
CGACTCATTAA GAACTACACC TGTACATAC CATTGGGTAA ATGNTTTAAG NGGGGAATGG 120  
TGTGACAAAC CTTCAAAAAA NATGAACACC TTAATGTTCA GGAAGTGAAGC TAACTCCCTA 180  
TGNTTAGGCA CAGCTTGATA CGAGCGGAGA CTTGGCAGTC AATTCCANGT CTTTATACT 240  
NATTACCTCA TCGTNACTGT NAGTGCAACT ATAGTCTGTT GTNGGAATTT GGNCATCCCT 300  
TAGTNTCNGA TGGTN 315

SEQ ID NO:1008

SEQUENCE LENGTH:314

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01145

SEQUENCE DESCRIPTION:

GATCAGAAAA AACAGAAGCC AAATCGGGG TCATCTTTGT TTTTAAAGCT GAAGTGGGAC 60  
TGTCTGGCAC TCTGTGTATT TATGCGTTCC AGCATCTGGA ACCTCCCATC CCTGCCCTCC 120  
TCCTGTGTAG CTGCCACCTC CCCGCTGGGC CCAGCATGGC TCACCTGTCC CGTGGGCTGT 180  
GTTTCTTGT GTTTTTCTCT TTGCAAAAGC ATAGCTAGGA AAGCGAATGA TAAGGGAAAA 240  
GTTCTCAGGG AATTGAAGTG TTGTTGCTAT GGTGACGTCC TTTTGCTGTG AATAAAGGTG 300  
CTCTTTGCAG CAAA 314

SEQ ID NO:1009

SEQUENCE LENGTH:313

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01147

SEQUENCE DESCRIPTION:

GATCCACAAT AGTGGCATGA GGCAGGCGAC TGTNTGTNAC CTCTATGTCC GCAGAGTCCA 60  
GCACGCTAAC AGCTGGGAGA TAAAGCAGT GGAGAGGGCT GTTGGGGGAC ATGCCATGGA 120  
AACTACCTAG GACCTGTTCC CTGAGTTAAC ATTCTAGCCT CATCTACTTG TTTTGGCCCT 180  
GCAGTCATA TACANACTGG CCCACCATTT ACGNACCATC CCCTCAAGTA ATCTTAAAGG 240  
TTCTCAGCCC ANACANATTA ACTGTTCTGA CCCACCTNC TTAATAAACA ATCCTGGGNT 300  
CAGCCATNTG AAA 313

SEQ ID NO:1010

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01148

## SEQUENCE DESCRIPTION:

GATCTGGCAG TTGAAAATTG TGGGAAAGAG AATTGTATG GGCACGTAT CTATGAAATA 60  
 CCTCATAACT TACGTTTACA TGTTTCCTA ACTTTTNGTA TTTTCNTNGT ATAGCCACCT 120  
 AGAGAATTCT TCATAGATTA AGAACTACAG TTTNACCAC TTAACATAAG TAAAACAAAG 180  
 TCCTTCATAA TTNAACCATT AGCATCTTTG GCCAAACCAA AATAAAGANA AGCATCTNCT 240  
 CCTAGTTGTG TGTGGGCAAC AGANACANGT TAAGGNAACA NAAATACTTA TATATACACN 300  
 GANCANANGT N 311

SEQ ID NO:1011

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01149

## SEQUENCE DESCRIPTION:

GATCTCCCTT GGTCTTCCAT GGGATGGTTA GTGTGGAGGG GAGATATAGA TTGTCCGGCC 60  
 GNTTGTGAT TCCATGGGAT TGATTCAGTC TTCTGGATT TTTTNTCTGT ATATTNGGG 120  
 TACTGGAGCT TTTAAAAATG CTTGGNTTCA GGTATTTTNA TTCATGTGAA GTGTATATGA 180  
 TTCTNTTGAG ATAAGGTTTT AAGCTAAAAAT GTNACTCCCT GNTTNGCNT CTGAACCCCTG 240  
 ACAGATTNAC AGGGACTTTG CTGGTGTAGG CTTTTTAAAG GGNTTANTAN TCCACTTTGA 300  
 GCCTNAAA 308

SEQ ID NO:1012

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01150

## SEQUENCE DESCRIPTION:

GATCTGGAGT TACCTGAGGC CATAGCTGCC CTATTCACCT CTAAGGGCCC TGTTTGAGA 60  
 TTGTTTGTTC TAATTTATTT TAAGCTAGGT AAGGCTGGGG GGAGGGTGGG GCCGTGGTCC 120  
 CCTCAGCCTC CATGGGGAGG GAAGAAGGGG GAGCTCTTTT TTNACGTGA TTTTNTTTT 180  
 TCTACTCTGT TTTCCCTTTN TCCTCCGNT CCATTGGGG CCCNGGGGT TTCAGTCATC 240  
 TCCCCATNTG GNCCCCGGA CTGTCTTNGT TGATTCTAAC TNGGNNNGGA AAGAAANTAT 300  
 TATTCAAA 308

SEQ ID NO:1013

SEQUENCE LENGTH:307

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01151

## SEQUENCE DESCRIPTION:

GATCCATGGG GCCGCAATGA AGCTTGAGA TACATGGGTG GCTTTGCAA GAGTGTTC 60  
 TTTTCTGATG TATTCTTTAA AGGATTCAAA TGGGGATTG CTGCATTTGT GGTAGCTGTA 120  
 GGAGCTGAAT ATTACCTGGA GTCCCTGAAT AAAGATAAGA AGCATCACTG AAGATAATAC 180  
 CTGGAAGCAT CATAGTGGTT TCTTAACTCT CAAAAATAAG ATTTCTTCTC TGTAGCCTAC 240  
 TTGTCTGGTT TATCCCTTAC AGAATATTAG TAAGATTTAA TCAATTAATA TATATATATA 300



TGCCAAA

307

SEQ ID NO:1014

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01152

SEQUENCE DESCRIPTION:

5 GATCGGTCCA CGAAAGTTAG CCCATATGTA TATCTTGAAT AGTATAGGGG AGGGTATTCA 60  
 TAAAGTCCTT ATGTGGTTTT AACTAAGTGA AATTATGGAC AAGAGAANNN NTTGTAAAAT 120  
 CGTCTTAAAG GCAAATTTAA TTTNACTCC TGTATATGGG ACATTCGTTT TATTAAGTGT 180  
 CAGACACAAT TTCTGTTTTT ATCTGAGAGC CAGTTTTCCT TTATTTCTAC ATCTAAAATA 240  
 15 AGANCATATT GTACACTATT ATATAATACA GAATTGTCTT AAACTTAAT AAATTCGCAT 300  
 TTAAAA 306

SEQ ID NO:1015

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01153

SEQUENCE DESCRIPTION:

25 GATCTCAGCA GTGGGGCAGG AGGGTGCCTG ATTTGGGGGA GTCCTGACCC GAGCCTGTTG 60  
 TCAGAGTTGG GAGGGGCTCT GAGCAGTGTG GGGCAGGCCG GGTCTCCCAT CCCGAGGCCA 120  
 GCGTTCCTGT GCAGAGCCCC ATCCACTGGT TCTTGCCCTG AGCCACATAT GTCTGTNCCA 180  
 TGGGCTGAGT GCCACGACAG GCCCGTGTGA CAGCTGCTGC CCACGCATNT NGAAGCTAGG 240  
 30 TGGGACTCAT TCCTAATTCT GCCGTGTGTA TGAGACTTGA TTAACAACCC GCCACTTTTT 300  
 TGCAAA 306

SEQ ID NO:1016

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01154

SEQUENCE DESCRIPTION:

40 GATCAACAAG AAATGTTATG AAATGGCCTC CCACCTTCGG CGTCCCAGT ACTGACCTCG 60  
 TCTGTCCCTT CCCCTTCACC GCTCCCCACA GCTTGCACC CTTTCTCTCC CCATACACAC 120  
 ACAAAACATT TTATTTTTTG GGCCATTACC CCATACCCCT TATTGCTGCC AAAACCACAT 180  
 GGGCTGGGGG CCAGGGCTGG ATGGACAGAC ACCTCCCNNT ACCNATATCC CTCCCGTGTG 240  
 45 TGTTTGGAAA ACTTTTGTTT TTTGGGTTT TTTTTTCTG AATAAAAAAG ATTCTACTAA 300  
 CAAA 304

SEQ ID NO:1017

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01155

SEQUENCE DESCRIPTION:

5 GATCTAAAGC AGGTNGTGT GTTTACATGT TTCTACACAT TTCATCCTTT AAAAAGTTGT 60  
 TGAGAGAGGT TGTATTTACC TTCCCAAGGT TGGAAAGCAG GGGAAATTCC CAGTGTCTTA 120  
 GTTTCCACC AGAGGAATAT GTGTAAGTAG CAAAGTATTT GCTGCTTACA TATAGTGTGT 180  
 ATGTATGTAT ATATGTAAAT NGTGTGTTAA AGAGCTGATA CTGATTTTCA TATGNCAATG 240  
 TTAAGGCAAA GGCCTCCCTG CATTGANGA GCAGGTNTTC ATTTATATGT ATTTTNGGGA 300  
 10 TAAA 304

SEQ ID NO:1018

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01156

SEQUENCE DESCRIPTION:

20 GATCAGAAAT NAAGTGCAGC AATATCATGA ATTCTNAGAA GNCTTTAAGG GAGCCAGTNA 60  
 GTCATACAGT ATCCACAGTT GANTCACTTA AAGATGTCAG TATACGAACA TTATTCACAA 120  
 TCCTTGGGCA ATCTCATTTT TTTCCCTTC TCCCTCCTC CCCTGCCCCC ATACATTTNT 180  
 ATCCTTAANG TAGTTTGGGA GGGGCAGGAT GTACTTAACA TCTCANAAGC TAGATTGGGA 240  
 ACATNTCANT ATAAGACTGA GTTTAAATT ANGGTAAAA TGNCATCAGA ANANTTGGGN 300  
 25 GGGN 304

SEQ ID NO:1019

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01157

SEQUENCE DESCRIPTION:

35 GATCTAATAC TACTGTCAGT TTTAATGTGC ACTGTGTTTT ATACAGTATC TTTTTTGT 60  
 CACTTNGGAA ATTTTACTA AAAATTGCAA AAAATAAAGT ATTGTGCAA GATGTAAGGN 120  
 TTTTGANAC TTGNNGTGCA TTAATAANTA GACGATTAAN TCAAGGAAA 169

SEQ ID NO:1020

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01158

SEQUENCE DESCRIPTION:

45 GATCCTCTAC CACAGACATT AATAGCTGAG CAGGAGCCAC ATGGATTGAT TGTATCCACT 60  
 CACCATGAC GATGGCATTG AGCGTANTAG CTTATTCCA TCACTACGTG TTTTGAGCT 120  
 TGCTCTTACG TTTAAGAGG TGCCAGGGT ACATTTTGC ACTGAAATCT AAAGATGTTT 180  
 TAAAAACAC TTTTACAAA AATAGTCCTT TGTCAATACA TTATTTACTC ATGTGTTTGT 240  
 ACATTTTGT ATGTAAATT ATGAATGATT TTTTCACTAA AAAATACATA TTCAAGAACC 300  
 50 AAA 303

SEQ ID NO:1021

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01159

SEQUENCE DESCRIPTION:

GATCCTTNGG CTCAGAATCT CGAGAACCGC CTGCTCCTAA CAATTCAGCA AGTCAGGGGC 60  
 TTCCTCTCTG TTAGTCCCCA AATCCTTACT TATTTTAAAA AGACTAGACC CTCTCTAAAG 120  
 ACTGTTCAT TTTAACAATG CTGATTCTG CATCCGTGGG TTTGTGAAA GAGAGCTAGC 180  
 TGGCGGTTAG AGCCTGGAAG AAGGAGGGAA GTGGCACCTC ACTAGCATT ATCACTTTT 240  
 TCCTTCTCTT TTTAAAAATA AAACCAGACT CTGTTCTGAA AATAAAAAAC TTGAGACTTG 300  
 AAA 303

SEQ ID NO:1022

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01160

SEQUENCE DESCRIPTION:

GATCTGNCCT ATCCGAGCTT GTTATTGGGG AGCCATAAGA GTCAGTTATC CAGAACACAG 60  
 TTTTGATAA GCTTGTTTAT GATTCAGTAA TGCAGGTGAG AGTGTCTAGC AGTTCTTGGT 120  
 AAGCTACTCT GGACATCTTT AAATTATTTA TCCTAATGGA TTCCATTCTG GTTATGTAT 180  
 AATCGTTTCA AGACTTTGGG AGTCTTTTAT GAACAAATGC TCATTGCACT ATATTATATG 240  
 CAAATTGTNN NGCTGCTAGG TTTTCAAAAT TTGAATAATA AAGCCTTTTC ATGTTCTTTT 300  
 AAA 303

SEQ ID NO:1023

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01161

SEQUENCE DESCRIPTION:

GATCAAAATC CTGTACAATA CTATAAATAT ATATTNATNT TTTCACAGTC ACCAAGTGTA 60  
 TTGTAATGTA TACTTGAAAA ATGTTATAAC TTATGAAGTA AAGTTTCTNA TAGTAGTCTT 120  
 TAAAAGATAT AAGACTTAAT ATGTTTTATT CAGCTTCTAT AAGTGTGACC AGTTTNNATA 180  
 TTTATTTATG CTAATATTTT TAACAAGTCA TTTCAAAATA TGTGTATCTC AAATCCTCCC 240  
 NAAAGTGTG TGGCCTTAAC TGTTCAATAT TGCAATAAAA NATATATNTN NNTATGTGGT 300  
 AAA 303

SEQ ID NO:1024

SEQUENCE LENGTH:302

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01162

SEQUENCE DESCRIPTION:

GATCTATGGA AAAGTGGGAA TGTAATGTAG GATTCTGTCA GAGCTCCTAC AGAGCACAGT 60  
 TGCCTTTAGT TTCTTTTAAA GATGTAAAAA TATTGTATAA TACAGTTTTG TCCCTACACA 120  
 ATTTGATTTG CCAAGCTTAG TGCATTATGA TACCTTTATT TATTTGTTTT GGGCAGTATT 180  
 ACTATATATA TATAANCATA CAGTTACTGT TTTATATATT CTTAGGTCAT TCAAAGCCAT 240  
 GTATGCTGTA AATGTGCTAG TCTTTAGAAT GACACATAAT AAATAACTGA CAAGATATTA 300  
 AA 302

SEQ ID NO:1025  
 SEQUENCE LENGTH:435  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01163

SEQUENCE DESCRIPTION:  
 GATCGAGCCA TTGAAAGCTC ATTACCAGTA GGACATAATT TTTGGCTCTC CCTATTCACA 60  
 ACCAGTGCAC AGTTTGACAC AGTGGCCTCA GGTTCACAGT GCACCATGTC ACTGTGCTAT 120  
 CCTACGAAAT CATTGTGTTT TAAGTTGTGT TTATTCCTGG AGTGACATGC CACCCCGAAT 180  
 GGCTCAGTTT CACTGAGGAT GCTGTCCTCT GATTAGCTG CTGCCTCCAG CCTCTGGCTT 240  
 GAGAACTTAC TAAAGGCACT TCCTTCCTGT TAAACCCCTG TTAAGTCTCC ATAAATTTGG 300  
 TGATTCTCTG CTAGGCCTAA GATTTTGAGT TAACATCTCT TGAAGCCAAA CTCCACCTTC 360  
 TGTGCTTTTT TGCTTGGGGA TAATGGAGTT TTTCTTTTA GGAAACCAGT GCCAAGGAAT 420  
 GNCAAAGGTN TTAAG 435

SEQ ID NO:1026  
 SEQUENCE LENGTH:298  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01164

SEQUENCE DESCRIPTION:  
 GATCCACATC CTCTACAGGT CGGGGACCAA AGGCTGATTC TTGGAGATTT AACACCCAC 60  
 AGGCAATGGG TTTATAGACA TTATGTGAGT TTCCTGCTAT ATTAACATCA TCTTAGACTT 120  
 TGCAAGCAGA GAGTCGTGGA ATCAAATCTG TGCTCTTTCA TTTGCTAAGT GTATGATGTC 180  
 ACACAAGCTC CTTAACCTTC CATGCTCTCA TTNCTTCTC TGTGAAGTAG GTATAAGAAG 240  
 TCCTATCTCA TAGGGATGCT GTGAGCATT AATAAAGGTA CACATGGAAA ACACCAAA 298

SEQ ID NO:1027  
 SEQUENCE LENGTH:328  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01165

SEQUENCE DESCRIPTION:  
 GATCCACTTT GTTGGTTGTT GTTGCAGAAG ACTGAACTGT TTTGGAATAN TTAACAATTA 60  
 CAGAAACAGT CAAGTGTTTT CCAATGTGGT TGTCCGGTTT CTATGGCCTT GCTGTGTACT 120  
 TTCCCTCTTT TTGACAGTAA ACTTCTGCCT ATGGCTTACA GTTGACATT TAATTTATTA 180  
 GCGCTGCTCT GCACCCCTNC CTTGGGAGGG AGACTTCATG TGGTTTATTG CGAGTTTTTT 240  
 TGTTTACTTT TCAGGGTTNG TACCTACAAA GGTTTTAATA ATAAAAANCA AAGNTTTTTT 300

NGGCNATTNG TCTTGTCTTN GTGGGAAA

328

SEQ ID NO:1028

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01167

SEQUENCE DESCRIPTION:

GATCTACAGT GCTGATGAGA AGAGAGCCCT TGCATCCTTT AACCAAGAAG AGAGACGAAA 60  
GAGAGAGAAC AAGATTCTGG CCAGTTTTCG AGAAATGGTT TACAGAAAGA CCAAAGGGAA 120  
GGATGACAAA TAAAGATTTT NTGATTGTCC AGAAGACATT TTAAACAACA AAAAAGAAAAG 180  
TCTGGGTTC ACACATACAT AGAAAAAGAT TATTATGTTC TGAGAAAGCT TTACAGTGCT 240  
ACTGTGCCTT CTATTTAATT CTTTCAGTCC TTCAATAAAA AGCTGCCTAT TGATAAA 297

SEQ ID NO:1029

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01168

SEQUENCE DESCRIPTION:

GATCCTGCTG AAATACATCT GCAGCTGACA ATGAGAGAAG AAACAGAAAA TGTCATGTGA 60  
TGTCTCTCCC CAAAGTCATC ATGGGTTTTG GATTGTGTTT GAATATTTT TNCTTTTTTC 120  
CTTTTCCCTC CTTTATGACC TTTGGGACAT TGGGAATACC CAGCCAATC TCCACCATCA 180  
ATGTAACCTC ATGGACATTG CTGCTCTTGG TGGTGTTATC TAATTTTGT GATAGGGAAA 240  
CAAATTCCTT TGAATAAAAA TAAATAACAA AACAATAAAA GTTTATTGAG CCACAAA 297

SEQ ID NO:1030

SEQUENCE LENGTH:296

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01169

SEQUENCE DESCRIPTION:

GATCCAGAAC ATGGGAAGTT AGGGAAAATG TGTGATTTG TGTGTTGAAT TACTGTCAGA 60  
ATTACATACA CAATTACAAC AAACTTTTT TAAAAGACAT TTCATTGTAC TGCAAAAATC 120  
TGAATATTTA TATTTCTNGT TTTTTCTTT ATATGTTTTG CATTTTANTA TGTGAGCCA 180  
CTGGAAAATT TGTAACAGNT TANTTTGTTA TNGGCGTTA ANTGTGTTGT CATTGNCTCC 240  
ATTGCTTTG TCCAGAGCCT ATTATTATGG AACCAATAAA NTTAATGGG GTCAAA 296

SEQ ID NO:1031

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01170

SEQUENCE DESCRIPTION:

GATCCTAGTC CCCTGCCCTC TGGCACAGCT GCTTCCTGCA AGANAGCAAG TTTTGGTCT 60

CCCTGAGAAG CCATGTCCCT CGTNCCTGNT CTTGCCTGTC CCACCTGTGC CCTGCCCTCC 120  
 AGCTTGTATT TAAGTCCCTG GGCTGCCCCC TTGGGTGCC CCCNGCTCCC AGGTTCCCCT 180  
 CTGGTGTNAT GTCAGGCATT TNGCAAGGAA AAGCCACTTG GGGAAAGATG GAAAAGGACA 240  
 AAAAAAATTA ATAAATTTC ATTGGCCCTC GGGTGAGCTG AGGGTTTTTG CAAA 294

SEQ ID NO:1032

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01171

SEQUENCE DESCRIPTION:

GATCTTCAAG AAGTGAAAGA GACCGAAAAT CAGACAGGAA AGACAAAAGG CGTTAATGGA 60  
 AGAAGCCAGG CTTTCTTAGC CATTCTTTGC AGCAGAAGAT TTCTTGATAA AAAAGGATTA 120  
 CCTTTCCTTG TAAAGAGGAT GCTGCCTTAA GANTTGCATG TNGTAAAANN NCTTTTGGGA 180  
 AAATACAGAC TGTTTGTTTA CCAGACATTC TNGTACTGNT NGCATAATNN GGTAAGAGTT 240  
 ATTNATCAAA ATNATGTGAG GTTCCAAAAT ATGTAAAANT GATATNATAA AAN 293

SEQ ID NO:1033

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01172

SEQUENCE DESCRIPTION:

GATCAGCGGT TCTTTTGGCA GCAAAGCCTG CATCTGTGTT GACTTGCAAG ATTTTGCGTT 60  
 TATTCAGGCA AAAACTGGTC AAAATGGTTA CTACATGATT TGTTCACAGA GGTTCGAAAC 120  
 ATTCAGTGAA ACTTTTAAA ACTTTGATTG CATGATGTAT TTTTTTTTNA GAAAGTTATT 180  
 GTTTGAGAAT AATGTCTTTT TATACCAGGA AAATAGTTAT CCNGAATGAC GTTGAAAAC 240  
 CCCCTCCCC TTNATTTTNN TTAAATCANT ACATGTGAAA GTNNCCANGC AAA 293

SEQ ID NO:1034

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01173

SEQUENCE DESCRIPTION:

GATCCCAATT CCACATAAGC ACTTTTGGAA GAAAACAGCC AAAGTTGGCC TAAAATTGGC 60  
 GCTGGAAATT GGNCTGGGAA AAATCTTGTG GTTATTCCT TAAAAAGGA ACAAACCTTT 120  
 AGTATTTAAT TAGTTGATTT ATTTAATGTA ATTNCAAACA ATTAAATTAT GAATAATGCA 180  
 ATGTACAGTA GAATCACGTT TTGATTTTAT TAACACTGAC CAAGTTTAAAC TCCATATGAN 240  
 GTGTAAGCTT GATATCGTTT ATGATGTCTA TCAACTGTAC CAAAAGTAAA ACATTTAAAA 300  
 NCANNAAA 308

SEQ ID NO:1035

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01174

SEQUENCE DESCRIPTION:

5 GATCTCAAGT GACCCGCCTG TCTCGACCTC CCAAAGTGCT ATGATTACAG GCATGAGCCA 60  
 CTGCACCCAG CCAAACATGA CTTTCCATC CAGAGTAAAT CCAACTAACA AGAATCCACC 120  
 CTTGGAGTTC ATGTAAAAAT ACATGACACA GGGTGATGAA AGTGCTTTGA AACTAGATAC 180  
 AGGCAGTGGT TCTATAGCAT GGTGAATGTA CTCAAGGCAA CTCCTTTACT TTAAAAATCGT 240  
 10 TAATTTTATG CCATGTGAAT TGCATCTCAA TAAAAATTGT TTTCAATTTA AA 292

SEQ ID NO:1036

SEQUENCE LENGTH:363

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01175

SEQUENCE DESCRIPTION:

20 GATCGGGAAC TCCTGCTTCT CCTTGCCTCG AAATGGACCC CAACTGCTCC TGCTCGCCTG 60  
 TTGGCTCCTG TGCCTGTGCC GGCTCCTGCA AATGCAAAGA GTGCAAATGC ACCTCCTGCA 120  
 AGAAGAGCTG CTGCTCCTGC TGCCCTGTGG GTGTGCAAGT GTGCCAGGG CTGCATCTGC 180  
 AAAGGGACGT CAGACAAGTG CAGCTGCTGT GCCTGATGCA GGACAGCTGT GCTCTCAGAT 240  
 GTAAATAGAG CAACCTATAT AAACCTGGAT TTTTTTTTTT TTTTTTTNN AAAANCCCTG 300  
 25 NCCNNTTGT AAAATTTTTT TTTNNNTGAA ATANGNAANG GNAATAATN ATCNGGNNTN 360  
 TTN 363

SEQ ID NO:1037

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS01176

SEQUENCE DESCRIPTION:

35 GATCTTGGAA AGCACTAGAA ACTAAACATC TTCACCAGGT GCTGAAGAAA AGTGTCTTCG 60  
 TTTTAATTGC CAAGCAGGGA TGTGGACATT TGGATGGTGA CTTTCCTGGG TGGTTCCCA 120  
 TAGATTCAAC ATTGCCTCTA ATGGTGTCTA CACCCGTCAT ACTACCAGCT GAGATGGTGG 180  
 TGGGCATAAG GAGAATTGT GCCTATAACC CTTAGTGTGT TCTGGTTTTT TTTCTTTTAA 240  
 40 TTTTAAATT GTCGTAAAAT ACTCATAAAA CATACTGTCT TCACCAAA 288

SEQ ID NO:1038

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS01177

SEQUENCE DESCRIPTION:

GATCACCTTG TAGTCTTTAA ATTCTTGGTC CCTGAGGCCA AGTCCACAAC TTGCCTTCTA 60  
 GTCACCTGCC TGCCCGCAGT GGTGGTGGAT GTGTTAGCTG GTAGATTGG AATCAGTCAC 120  
 50 CAGTCTTTCT GTACTGTCTT GGTAGCTCT ATATAAGTAG GGGCAGCTTA GCCCTGAGGC 180  
 CCAGAGACCT GCTGTCTTTT TTCTCTTGA GGGAGGAAAT AAAACTGCGG AATACAATGT 240

55

CCTTCCATAG CATGGGAAGA AGAAAATAAA CATCTCCTTT CCAACAAA

288

SEQ ID NO:1039

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01178

SEQUENCE DESCRIPTION:

GATCCACCCT CCTGTAAATA TGGAACAAAT ATCTGAATGA AATCCACCCT AGGAGACGGA 60  
 GCAAACTAAA CTTGTGGTTT TNCATTTAAC TTTTGACTAC AGCATGGCCC CATGGCATCC 120  
 ACACCAAGAG GGTGTTGTGA TGAGGTGCCG GTGTGCAAAG GGAACTTTAG TTTTCCACT 180  
 GGTTCCTTATC TGCTAGCCTT TTACATACAT GTGTACTATA TTTGTTTATA GACTGTAGGT 240  
 GGATATATAA TTTAAAAGCT TGATTTAATA AACATTTAAC CCCNTAAA 288

SEQ ID NO:1040

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01179

SEQUENCE DESCRIPTION:

GATCTTCAAG TATTTCGNAC TTTCGAGTAC AGCTAATTGG ATAATCTCAA ACCCTTTAGT 60  
 GAAAAATATCT TAAATGCATT GAGAATATTT CCTAATTACC TGTGTATGCT ACAGTACAGA 120  
 CATTAAATTCT ATAAACATGT TCATAGGTCT TCCCCCTCGC CCCGNCCTGC TTCTAAGGGC 180  
 ATTTCTGTGT TCTNTNAGT GAGTTCATGN ATGTTTACCG GTTCTGGCGN AANGTTTCTT 240  
 GCATNCTGAG CATAAAAATA NTAAAACCNA CTGATANTTG CTTGAAA 287

SEQ ID NO:1041

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01180

SEQUENCE DESCRIPTION:

GATCTGCACA CGCATAATAA TCAGCATTGA GGGCAACAAA ATGCCATTGT GACCTTGCCT 60  
 GGAATGTGTC CCCATCTCTA CTCTAAGAAA TCGCAATGG ACTCTTTGGA GAAAGAAGAT 120  
 ATTTTAAAAC ATTTTATAGT TGCTGTGAAA TGGTTCAGCG TGTATCAGAT GTTGTCTAG 180  
 GACTCACATT TCTCTCAGTT ATATTTAAAA CCGTTGTGTA CTTTGTACAA NGGAATACTA 240  
 GTCATACTTC TATAAACTTT NCACAATAAA ATTNTCATTG TGGGTAAAA 289

SEQ ID NO:1042

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01181

SEQUENCE DESCRIPTION:

GATCGACCA CTGCACTCCA GCCTGGGNA CACAGTGAGA CCCTCTCTCA AAATAAATAC 60



AGNCAGGCAT AGTGGCTCAT GCCTGTAATC CCNGCATTIT GGGNGGTAGA GGTGGGTGAA 120  
 TCACCTGAGG TCAGGAGTTC ANGCCCAGCC TGGCCAACAT GGCAGAAACC CATCTCTACT 180  
 AANTATACAN AANTTAGCCA GGTGTGGTGG CCTGCACCTG TAATCCCAGC TACTCAGGAG 240  
 GCTGAGGTAG CTTGANCCCN GGAGGCANAN NTTGCAGTTA NGCCAAN 287

SEQ ID NO:1043

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01182

SEQUENCE DESCRIPTION:

GATCTCTCCT GGAGTATGAA GACCTCCAAG GACTCACTTT CCCTCCCTTC TGATGCCAGA 60  
 GCAGACCAAG CTGTCACTT CCAGTCTCAT GCTGAAGTCT CCAGCTTCTC AAGCTTAGAA 120  
 GAGTTTTTNG AAGAGTCACT TTCAGCTCAT GCAGCTCTCA CAAGTGTGAA GGGAGTGGAT 180  
 TGGGGGTGTT TTCCTTGCCA TTTTCGAAAA GAAAAAATT ACCTGGTGAT TGGTGAAAG 240  
 ATACAACGT CAAAAATGCA TGATTGAAGC AATTAGGTT GGGAAA 286

SEQ ID NO:1044

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01183

SEQUENCE DESCRIPTION:

GATCAATAAA TNATACAAA TATATGTTA CAGTATGATT TAAAGTCTGA TTCAGACCAG 60  
 GGACTCTATT TTAAGTTCAA CTGAAATAAC ACTGGGTTTT AATTATATCA CAGGAAAAAA 120  
 AAAGTGCAAT TAAGTATTGT NATCGTGGAC TTTATAAAAG CAAAGGAAAT TGAAAGTAAC 180  
 TTTNGATTCT GTATCANGAA TCATATTNC ATACAGTCAT AACTGTCTTN CTGTGACCCT 240  
 TTCACAGGGC ACTGTAGGAT GGATTAAAGG TGGCAATTTA CTGAAA 286

SEQ ID NO:1045

SEQUENCE LENGTH:439

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01184

SEQUENCE DESCRIPTION:

GATCATACCG GTAAAGCAGG AATNACAAAG CTTGCTTTTC TGGTATGTNC TAGGTGTATT 60  
 GTGACTTTAA CTGTTATATT AATTGCCAAT ATAAGTAAAT ATAGATTATA TATGTATAGT 120  
 GTTTCACAAA GCTTAGACCT TTACCTTCCA GCCACCCAC AGTGCTTGAT ATTTCAGAGT 180  
 CAGTCATTGG TTATACATGT GTAGTTCCAA AGCACATAAG CTAGAAGAAG AAATATTCT 240  
 NGGNGCACTA CCATCTGTTT TCAACATGAA ATGCCACACA CATAGANCTC CANGAGCATC 300  
 ANTTNCATTG CACAGACTGA CTGTNGTTAA TTTNGTCACA NGTCTATGG ACTGANTCTA 360  
 ATGCTTCCNA AANTGTTGGT TTGTTTGCAN GTTTTCGANC CGTTGTTATG GCANGANGTT 420  
 NGTTTAGTTT CNGNTTGTN 439

SEQ ID NO:1046

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01186

SEQUENCE DESCRIPTION:

GATCTGGAAA CAGTTGAAAA CGAGACAATA TAGCCGGAGA CGCCTTATAT GATGATGCAG 60  
TATCGACTAC ATTAATGAAA GTAATGCCAA ATNCAACAAG AAAGCTGAAG ATTCTATGGG 120  
AATACACAGC TGAATTAACA GATTGGAAG AGAACANCTG NTAATCCTTC AGGACTGTTA 180  
TAGAGTTNAG ATGGGTAAAT TCTCCTANAA ATCAAGTCTT TTGAATTTC AGAATCAGAN 240  
TTAGAGCCNG CTCTACTAGA TTGNATAANT GNGGTCTAAC GGAAA 285

SEQ ID NO:1047

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01187

SEQUENCE DESCRIPTION:

GATCCGGGNG GACCCCTTTG CCCTTCCCTC GGCTCCCAGC CCTACAGACT TGCTGTGTGA 60  
CCTCAGGCCA GTGTGCCGAC CTCTCTGGGC CTCAGTTTTC CCAGCTATGA AAACAGCTAT 120  
CTCACAAAGT TGTGTGAAGC AGAAGAGAAA AGCTGGAGGA AGGCCGTGGG CCAATGGGAG 180  
AGCTCTTGTT ATTATTAATA TTGTTGCCGC TGTGTGTTG TTGTTATTAA TTAATATTCA 240  
TATTATTAT NTAATACTTA CATAAAGATT TTGTACCAGT GGAAA 285

SEQ ID NO:1048

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01188

SEQUENCE DESCRIPTION:

GATCGAAGTG ACAAAGTGTG TTTTCANTCA CAGTGGAGGC TACATCAAGC AAGGGGAGGT 60  
CCAGCCCTCT TGCAAGTGTG GTGAGAGGCT CTAAGTACAA AGACATGGGC ACCGGAGTAG 120  
GTCCCGTGTA GCATGCGGGT GCTGTAGAGA AAATTCAGTG ACGTACATGG CTCTGGTTCT 180  
GGACACAAAA TCTGTACTGG AGAGGAAATG ACTGCTGAAA TAAGGCGATT GTATGAATAT 240  
TTAAATGCC TGGAACACTA AAGTAAAGTA ATGATATTTC AAA 283

SEQ ID NO:1049

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01189

SEQUENCE DESCRIPTION:

GATCCTCGCA GCTTCCTNCG AGCGGGGTGT CGCAGTCTTG TGCACAGAGT AAACCTTNCT 60  
AGCTGCCCC TTTCTGTAATA GTGAAAGTTG GTATTTAACA TTTATNCATT TTTAAATAT 120  
TTGGAAGGTC TGANCTTGTG AAAAGAAAGT GGTGNGCTG AGGTTGGAGG NAGCTGAATG 180  
GAATCTNACG GTTGNAGTG GTGGAATG GAAGGATACC AGGAGGTATT TGGGAAGGCC 240

AATGGCGTGG CTCCTTTGAG GAAATAAAAC ACTAAGCATG AAA

283

SEQ ID NO:1050

SEQUENCE LENGTH:281

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01191

SEQUENCE DESCRIPTION:

GATCCTTTTC ATACCTNATT TGGAAATTGCT GGATTGTAAC TTTTGGNAGA AGAACAGATT 60  
 AAACCTGTTA ATCCTGTCTT TTGCATGCCT GAAGAAGTGC TTCAAAGAGT GAATGTTTCCAG 120  
 CCTGAGCTAG TGAGCTAGAT TCATTGAATT GAAAGTTGCA TAGTATAGTT TTGCCATTTT 180  
 AACATTTCTG TATTNAAAGT GCTTATCGAA TCTAAAAGTG ACTACTGTNA ATATTNNGTA 240  
 TATNGTGTNA AATTAATTNN ANTAATNAT ATAATTNTAA A 281

SEQ ID NO:1051

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01192

SEQUENCE DESCRIPTION:

GATCAATGAC AGAGCCTTCT GGAGGACATT CCAAGACAGT ATACAGTCCT GTGGTCTCCT 60  
 TGGAAATCCG TCTAGTTAAC ATTTCAAGGG CAATACCGTG TTGGTTTTGA CTGGATATTC 120  
 ATATAAACTT TTTAAAGAGT TGAGTGATAG AGCTAACCTT TATCTGTAAG TTTTGAATTT 180  
 ATATTGTTTC ATCCCATGTA CAAAACCATT TTNCTTACA AATAAA 226

SEQ ID NO:1052

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01193

SEQUENCE DESCRIPTION:

GATCACAGCA TAAAAGAATC ATAAGATAAA ACATCAAACCT ACCCAGCAAC CTGAGAAGCA 60  
 CAGAGTGTTA AAGCCTCCAC CGTGTGAGAA ACTAAATTAG GGTAAGTAGC TATTGAGTAT 120  
 ATTGAGTACC TTCAAAGCAC TCAACTGACA GGTTTTACAG ACTGGAAATT ATAATACTTA 180  
 TGACATTTCT ACCTTTTATA TAACCAATAA TCTACCATAG AATGTAGTAT TTTTANAGCT 240  
 ATTAGCANGC AATATATTAN NNTANTANTG NATTAAT 277

SEQ ID NO:1053

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01194

SEQUENCE DESCRIPTION:

GATCCAACCC GAATAAGATT AGAAGCTTTC CATCAGTAAA AGGATGTTTT CTTTTTTCAC 60  
 ACAGTAAAAA TTCTTATCAT TCAAGGATAT TGGAACCACA GGACTATTTG GATAAAAAAC 120

ATTATTTGCA AATTAATGCG CATAGGCCAT CTTACTTTTA TTGCAAAATG GCATGTGCTG 180  
 CCATCTATTA TTCATTTTAA AATGGTCATT TCTTATTCAG TGAGTGCTTT AGTGTTTTAA 240  
 ACTATATGGA TAAGAATGCA GGTAGGATAA TATTCTN 277

5  
 SEQ ID NO:1054  
 SEQUENCE LENGTH:283  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 10  
 CLONE:HUMGS01195

SEQUENCE DESCRIPTION:  
 GATCCTGAGG ATTACAGCTG TGGAAATTTT GTCCATGCTT CAAATAATTT TGAAAGAAAT 60  
 TTTCCCATAT NAAAAAGGA GAGAACTN GCATCTGTTG AAATTTGGAA NTTCTGAAAT 120  
 15  
 NATAGTATTT TAAAAATTG CACTGAAGTG TATACACATA AAGCAGGTCT TTTATCCAGT 180  
 GAACAGGATG TTTTGCTTTA GCAGCAGTGA CATAAANTTC CATGTTAGAT AAGCATNTGT 240  
 TNACTTACCT NGTTATTAAT TATTNTTGG AAAAGCAGTG AAA 283

20  
 SEQ ID NO:1055  
 SEQUENCE LENGTH:277  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01196

25  
 SEQUENCE DESCRIPTION:  
 GATCTGTGTA TGCTGTTGGG TCGGAGTGCC AGTNACTGCT TTGGAAGTCT GNGTTCTGGG 60  
 GCTGCAGAAT GACAAACGTG TCATGGGATT AAAACCAATC AACTGTGAAT TGTGAAATTG 120  
 AAGCTACTCT TTCGGTTTTA TTTTCTTTAG CATATTGAGT ATAGAAATCT GAAACTTATT 180  
 30  
 TAAAAATTTAT ACTGCTTTTG TTGATGGCTC ATTTTGGCTG TGTATCCTCA CTTATGTACT 240  
 GATTTCGTGAT AAAGGCTTGA CATTATTATA ACANAAA 277

35  
 SEQ ID NO:1056  
 SEQUENCE LENGTH:103  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01197

40  
 SEQUENCE DESCRIPTION:  
 GATCGACCTT NTCTGTTTTN TTTTGTTTTN NTTTCTNTTT CCTGGCCATG AGGACAAAAA 60  
 TTAGTGAGTG GCCCTTAAAG AGGGAAGTTT GTTTTCAGCT GTN 103

45  
 SEQ ID NO:1057  
 SEQUENCE LENGTH:291  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01198

50  
 SEQUENCE DESCRIPTION:  
 GATCGACCAC ATCTGGATG CCCTGTAGCC CCTGCCCGCA TCCTCCAGGG GGGCCAGGGT 60  
 GCCTGCATT TNCTGTGGCA GGCAGATTGG GTGGTAGTGG GAGGTTGTGC ATGGAGGCCA 120

GTNAAAGCTG ACATCTGTAA AAGGCCTTCA AGGAAGAGAA ACCAGGCCCT GCGTCAGGCA 180  
 GTGTGAGTTT GCCGTTTGTG CTTAACTTTC TTTTTTTTTT TTAAAAAAN GGAAANNNTT 240  
 AAAAAANCTC CCTTTAAAC CAAANCATNT TTGNNTTNN NCCAAGGGAA A 291

SEQ ID NO:1058

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01199

SEQUENCE DESCRIPTION:

GATCCCGCTC TGTNTTTC AGGTTTGTGC TATTCTNATT ACATTATCGA CTAGTCTGAA 60  
 GCAGAGCTGA TATCTCTTA CCTGGGAGT CAGCTTCACC AGCCACAGCT GCTGAAAGAA 120  
 TAGCTTGGAG ATTACCCCA CTGCATTCT GTNGCTCAA CTTTTGACC TTTGTGCTAT 180  
 TTGAGAAATC TTTGAAATGC TGAAGGTATG ATTCTCCTC AGGGGGAACA TGCTTTGGA 240  
 AAAACGCCCA CTTAATAAAA TGTATTCNT TTCAA 276

SEQ ID NO:1059

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01200

SEQUENCE DESCRIPTION:

GATCTGTATA TGGTAAACAG GGGTTTAACC ACATGTGGT AACATGGATT AATGTGGAN 60  
 TTTGGCTCA AGAACACAAC CTTAGGACCT TGGNCCCAA AAGCTGGTGG TGAAATGAGA 120  
 GGNCCCAATT TAAGAAGACC CTTATGGAGA CCTGAGGCTG CAGAACTGG TAGGTTTCAT 180  
 CAGGTGGTTA AAGTCGTCAA AGTTGTAAGT GACTAACCA GATTATTTCA TTTTAAACC 240  
 ACAGAATAAA AATGACACCT GAGCTTCTCT NTAAA 276

SEQ ID NO:1060

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01201

SEQUENCE DESCRIPTION:

GATCTAGTTC CCCTGGAAAA GCTGCTGTAT TTTAATTT TAATGGAATG TAGCTTTNN 60  
 AATCCTGTCA CTGGCATCAA CAAAAGGAAT TATACCATGA GACCTATAG CTGACTTAA 120  
 AAGCCATTCA GTTCAGCTAT TGGGAGTTCA TGATGAATTA GCATATGCCA GAAAGGTTGC 180  
 TAACCTTAAC ATCTGAGAGC AGTAACACTG ATTTTATCTG CTGTATGAGA CTTGTGTCAT 240  
 TTTACTTTGA AATAAAGATT TTTTCCACA CTGAAA 276

SEQ ID NO:1061

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01202

## SEQUENCE DESCRIPTION:

GATCCTGTTT CTNGCTCTGA GTNCTAGCTA GCCAGCTGTN TTCACACTGT AAACATTCAT 60  
 CAAGGTGTAC ATTTGGTGCA CTTTCTGTG TCATACCACA ATAAAAAAAA NCCTATCATC 120  
 5 TTACAAAAC AAGACACCCA AGTCCAGGCC CAAGGAGTAA GTACAAATAT TCCTGTTTCT 180  
 GANCCATTAC TGTAATTGGC TCTNAAGNCT TGAGGTANCC TTATAGGTTA CTCATAGGGC 240  
 ATATACAAAT AAACNGTTT GTTTTCTTTT TNCAAA 276

SEQ ID NO:1062

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01203

## SEQUENCE DESCRIPTION:

GATCTTCAAC GGATACTAGA AAATGAAAAA GACTTGGAAG AAGCTGAGGA ATATAAGAA 60  
 GCACGTTTAG TACTGGATTG AGTGAAGTTA GAAGCCTGAA ACTTTTCTCG TATGGGGTGG 120  
 TTTTTCATT AAATCCTGGG GTCCATTTTA CAATCCATTA TTTTGGACCA CTGCTATGTG 180  
 20 TTCAAGTAGT ATGAGAATGT GATTGTTTTT ATCTGGTTAC ATATATATT CTTTGTCTAA 240  
 TTTAATATGT CAAATAAATG AGTTCATCTA ATAAA 275

SEQ ID NO:1063

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01204

## SEQUENCE DESCRIPTION:

GATCTCACCT CTTCTCAGG ATGGGGAGCT CACTCCGAGA ACAGGAGAAA TCAACATTGC 60  
 30 AGTAACAAGG TAGAATGGTT TTGAAGAAGA AAAAACCTGC TTTCTGACTG ATTTTGCCCT 120  
 GAAGGAAAAA AGAACCTATT TTTGTGCATC ATTTACCAAT CATGCCACAC ANGCATTTAT 180  
 TTTTAGTACA TTTTATTTT TCATAAAATT GCTAATGCCA AAGCTTTGTA TTAAGAAGAA 240  
 TANATANTAN AATAAAAAGT CTGTGCTGTT GAAA 274

SEQ ID NO:1064

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01205

## SEQUENCE DESCRIPTION:

GATCCAAGTT CCTAGACCTC ATGGCTGTCC CCTCCCACCA GTCACCTCCA CTGCACAACT 60  
 CGGGCGGGGG TGTGACACCT CTCCCCACC NCCGACTCCG TGGTTTCCGT ATCGTCAACC 120  
 45 CTTACAGCCG CGACCCGGGA GGGGTCTGGC CTACACTGGT CTTCCCTTC CCATCAATC 180  
 TTTCTGCTTG ACAATGTAGC AACCCAGGCC CCCCACCCAC GGTCTCTCCC TTTTCTCT 240  
 CCCTGACAAT AAAGTCTGAA TTTGTTCTGC NAAA 274

SEQ ID NO:1065

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01207

SEQUENCE DESCRIPTION:

GATCTATCCA TCCAATGTTG TCATTATATT TGA CTGTGGT TCAACAGTAT TCGGTTGTCA 60  
 GACTAGGAAA GTTAAACGAA CAAAATGGTT TTAGTTTTGC TGAAGACTGG CCTTATTAAT 120  
 GGACAGCTTT CCTAACAAGA GATTATTAAC TTTTATCAGG TGTTAACATC TGTTCAGGA 180  
 ACATGGCAGT ATGTTTACAT GTCAGAAGTT TTGTTTAATT CTATGGTATT TCTAAATTGA 240  
 CTTGTTTAAA TAAATTCAGC AAATGGAAA 269

SEQ ID NO:1066

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01208

SEQUENCE DESCRIPTION:

GATCTGGTTG GCATTTTCTC CCTGATGATG GGAGCGTCAT TCTTTTGTCT TCATGGTTAC 60  
 TTGTGTGATA TAACATACAT CTGTNAAAGA AAATCACTTC TTTCTAGGGG AGGGAGGTAG 120  
 AAAAGTATCT TTCAAACCTG GTTTTINAGT TTGTNCTTG TCTTAACTTT GTGTNGGCTC 180  
 TAACTNAAAC ATGCTGATAT GTGTTTNCAN GANTTTTGGT TTAAGGANGT ATTGTATGGA 240  
 NGTCCACANA TTGGNAGGTN GTTCATCTN 269

SEQ ID NO:1067

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01209

SEQUENCE DESCRIPTION:

GATCGATTAA GGAAGGTGGT TATGGCTGGG TGGTTCAGGG GTTTTTTTGG GTTTNTTTTT 60  
 TTTTTCTTT GTCTTTTNA CTAAGCTG TTTAAGTTGA AGCATTCTNA GATGTTTGGG 120  
 GGGAAACATC CTCTNAAAAT GGGNCCITGT GCTTGCNTTC TGGGGAGGCG GTCCTGAGCA 180  
 GGTGANTCAT ANGGCATTGA TGCATATGTN ATATGNGGAC TGNACCCACC TTTCCCCCN 240  
 AGCCTTTGCC TCTGGGTTG TTGTNCTGN 269

SEQ ID NO:1068

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01210

SEQUENCE DESCRIPTION:

GATCCTCTTT GTTTGTNCAA AGGACCAGTT TTCCTAGGCC AAAGAAGTCT CTNCCCCATG 60  
 TAAGNCCTAT GCCTTNAAT ATCATGCACC ATGACCCACA GCCATCTGGT TATGTCTTAT 120  
 TTTTTCCTA AAAGATAATG TTTATNNTTA AAAAGGAAGG ANGGAGCAAG TGAAGTTTCA 180  
 TTCTGCTCCA GCGGTGGGGG ANGCGCTGA ATCCACCTGN TTCTCCTTTT GCAACCGNCA 240  
 GCANGCAGCT TTTCTCCGGG CNNCAGGN 268

SEQ ID NO:1069  
 SEQUENCE LENGTH:267  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01211  
 SEQUENCE DESCRIPTION:  
 GATCTAGAAG GTGAAGAATT TTTTATGTA TATATAGACA TATCTATATA AATNGTCTGG 60  
 CTGAGGCAGG GCCTTCANCT ATCATTGGT TAATAAATAC ATTTNAGTAT TTNCATTTC 120  
 TACTGCCTGC AGAGTTTCAG GTGCTTGNG TGTGAAAGTC CTGTAGATGT GTGCAAATTT 180  
 AACGAAATGA AATTGTATGT GTAAAANTGT ACGATTTTCC ACTGTGCAAC TGTAATNAT 240  
 AAATAANANA TATTTTNNCT ATTCAAA 267

SEQ ID NO:1070  
 SEQUENCE LENGTH:266  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01212  
 SEQUENCE DESCRIPTION:  
 GATCCTAGTG ATTCAGCCC ATGCATTAAG CAGGAAACAA TAATAAATT GTAGAATTCA 60  
 TATTTTCTA AAGGGAACCT AAAAAGTCT GCTACATGTT ATGTACAAA CTGGTTTATG 120  
 CCACATGGAC AGAGAATCAC ANGTTGGTT TTGGTACTTT NNGTTCCTCT TTGTATTCAG 180  
 TTGTATAGAC CTNCAAAAT CAGAATGAGA NGAAAGCTGT CTGTATCAA CCATTTANGC 240  
 ANTAATTGTT ATATNNANA GCTAAA 266

SEQ ID NO:1071  
 SEQUENCE LENGTH:266  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01213  
 SEQUENCE DESCRIPTION:  
 GATCCAAGTT ATACATGAAT AGAAAAAGAT GGTGTTAAAT TTGTGTGTAG GCTGGGAATT 60  
 CTTGCTGAAG GAATTGGAGA AAACCTGTTG CTGCAAAATT TTACATGTC CAGATGGAAA 120  
 GGGAAAGTCTA AGCNCCTTTT AAAACAATTT TTTTGTAT TTAATTAAGC AATTNCAGTT 180  
 ATCTGGGATT TTTGGGTCAG AATTTTAAAT TCTGTTTGAT TCTCCATATT CCAGTNAATA 240  
 AAATACAAA GCATTGTNTT TTAAA 266

SEQ ID NO:1072  
 SEQUENCE LENGTH:265  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01214  
 SEQUENCE DESCRIPTION:  
 GATCTTCAAT TCCTTGAGTC TGAGCTTGTG GGTGGAATTC TAAATTTGTA TCATAATCTG 60  
 TCTTTTGTA AACATTTTGA AAATATGTAT ATATAATATT GTATATGCAA ATTGTGTTGT 120



TTCACTTGTA AAGGGAAAAG GCTTATTTTN CTTTATATTT CTGATAACTT GTTTTGCATA 180  
 TGACCAGCAC TGA CTGAAAAG GCATGTGTAG CTGCAAACAC TGTGTGCTTT TTTGTGAAAT 240  
 GNAATAAAAA GTATTAAAT ACAA 265

5  
 SEQ ID NO:1073

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10  
 CLONE:HUMGS01215

SEQUENCE DESCRIPTION:

15  
 GATCGTGCCA TTGCACTCCA GCCTGGGTGA CAAGAGCAAA ACTCCATCCC CCCTGCCCAA 60  
 AAAAAAATN AATTTTCACA GAAAATTAAT AGCATAGGTA TTATNATCCT CATTTTACAG 120  
 AGAAAGAAAC AGCCATAGAG AAAAATGACT TGCTCACAAC ACAGGCAACT TTGACTCTAG 180  
 AGATANCACT TATTACAGTA AAATCCCTCT TCAGNCACAA AATACATGAT TATCTTAAAC 240  
 ACATTCTTAA TAAAANTTTA NCAAA 265

20  
 SEQ ID NO:1074

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01216

25  
 SEQUENCE DESCRIPTION:

30  
 GATCAAAGAT TGTAATAATA ATTTTGTAAG TTGTAAGCAA AAAGTTATTT TTATATTATA 60  
 TACAGTCTAA TTGTTTCATCC TAATTGTTCC TGTTCATC TAGTCAGAGA TTCAGTAAAG 120  
 NCCTTGGAAC AATATTGAAT TCTCTTAGCT TGTGTGTGTT TCTTTAATAT TTGAACTCAA 180  
 GTGGGATTAG AAGACTATNA NNNTACATGT ATGTTTCAGG ATATTTGACC TGTCATTAAT 240  
 AAAACAAAC AGTTTACAG TGCCTAAA 268

35  
 SEQ ID NO:1075

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01217

SEQUENCE DESCRIPTION:

40  
 GATCTCCATG TAGTCCATAT GAAACCTGCA GAGTGATTTT CCAGAGTGCT CGATACTGTT 60  
 AATTACATCT CCATTAGGGC TGAAAAGAAT GACCTACGTT TCTGTATACA GCTGTGTTGC 120  
 TTTTGATGTT GTGTTACTGT ACACAGAAGT GTGTGCACTG AGGCTCTGCG TGTGGTCCGT 180  
 ATGGAAAGCC TGGTAGCCCT GCGAGTTAAG TACTGCTTCC ATTCATTGTT TACGCTGGAA 240  
 TTTTCTCCC CATGGAATGT AAGTAAACT TAAGTGTGTTG TCATCAATAA ATGGTAATTC 300  
 CTAAT 305

45  
 SEQ ID NO:1076

SEQUENCE LENGTH:263

SEQUENCE TYPE:nucleic acid

50  
 TOPOLOGY:linear

CLONE:HUMGS01218

SEQUENCE DESCRIPTION:

GATCCTGTAA GTTGTCACTA AAATATGATT TAGAAATATT GGCCAAGGTG TTGCTTTAAC 60  
 TGAGGAGAAA AGAAAGCACA CTGCCTAAAT GTGTAAAAGA AAAATGCAGA GGTATTATAA 120  
 ATGTAAAGAA GTAACAATCT TTGGATTTGT CTATACATAT ATATATATAT ATATNGNTTT 180  
 GCCTTAATAT ACCCCCTTTT TTGTTTGTA CTTTCAACTG TAATCAGTTA ATAAAGTATT 240  
 TATTCTCTGC ATTCAAGTTC AAA 263

SEQ ID NO:1077

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01219

SEQUENCE DESCRIPTION:

GATCGACAGC AAGCAATCCT TAAGGGACTT TCAGAACTGA GACAGGGCCT TCTCCAGAAG 60  
 CAAAAGGAGT TGGAAAGTAG TCTCCTGCCT TTAGCTGAAA ATCAAGAAGA GAGTTTGGT 120  
 TCTTCATTTT AAATGTAGAA AATCAAAATCC TTCACATTG ATTTGTGTCT TCCAAATTAT 180  
 AAAATGTGCT CACTGGCTCA ACTGTATTTT TCAAATAGCC TAGATTTACT TATTTTTTTA 240  
 ANNGNNCATT AAAAATCTGT ATACTATGTA GTAAAATGCT GTACTGTNC TATACAATAA 300  
 ANCAGATACT TCTTTTGTA AAGCTTAGTA GTAAAACNCC ACCNNNNNNN NNTN 354

SEQ ID NO:1078

SEQUENCE LENGTH:260

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01220

SEQUENCE DESCRIPTION:

GATCGTGCCCT GTGAATAACC ACTGCACTCC AGCCTGGGCA ACATAGTAAG TAAGACCTTG 60  
 TCTCTTAAAA AAAATACATT CTGAAGAAAG TTCTACTTAT GANTACATT TATTTATAAC 120  
 AAACCTGGTGA AAATTTTAGA CCAAAACCATG TCTTTCTGGG TTGTAGTGAT TAAAAAATGG 180  
 TTAAGAGAAT GTTCCTATA CAAGGCATAT GTTATTAANC ATGAAATTTA GGNTTAGTTT 240  
 TCTCTTTGAA NNTCCTTTTN 260

SEQ ID NO:1079

SEQUENCE LENGTH:260

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01221

SEQUENCE DESCRIPTION:

GATCCCGAGA CTTGTGTCT CTTGGCTGAA NAACTNAGG TGCTCCCATC TGTNCGTGGC 60  
 CCATGANCTG GGATGGTCCT CCAGCTGCCC ACAAGGTCCG CCCCTCTNTC TCTGCACCAC 120  
 CTGTTTGCAT AAACACACTT TGCTACAATC TTGCTAGTNC GTTTTCTTAA AAGATAATCT 180  
 ATTTACTGTA AAAATAAATT GGACTTTGCA AAAGCTTTTA GAAGGAAAAG AAAGAGGATT 240  
 AAAGAGAATT GCTGGTGAAA 260

SEQ ID NO:1080

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01222

SEQUENCE DESCRIPTION:

GATCCAAATT TCCTTTTGAT ATTATTTTAC TTCTGCCTGA AACATTTTCT TTAACATTTT 60  
 TTATAGTGTT GTTTACTGG TGATGATTC TTTCAGGTTT TAAGTGCCTG AACAAAATCT 120  
 TTATTTACCC TACATCTTGA AAGATAGTTT CTCTGAGTCT ACAATTCCCA GCTGACAATG 180  
 TTTATCTTCC AGTACTTTAA AGATGTTGCT TCATTATCTG CTAATTTNNT TTGTTTCCAA 240  
 TAAAATGTTT GCTGGCAAA 259

SEQ ID NO:1081

SEQUENCE LENGTH:316

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01223

SEQUENCE DESCRIPTION:

GATCTGCGGT GAAGCCAAGC CGCAAGGTTA CAAGGCATCC TCACCAGGGA TACCCGCCTG 60  
 CTGCTCCCAG GTGGCCTGCG GCATNGCTAT GCTCAAGGAC CTGGAACCC ATGCTTCGAG 120  
 ACAACGTGAC TTAAATGGGA GGGTGGGTGG GCCGCAGACA GGCTGGCAGG GCAGGTGCTG 180  
 CGTGGGGCCC TCTCCAGCCC GTCCTACCCT GGGCTCACAT GGGGCCTGTG CCCACCCCTC 240  
 TTGAGTGTCT TGGGGACAGC TCTTCCACC CCTGGAAGAT GGAATAAAC CTGCGTGTGG 300  
 GTGGAGTGTT AGGAAA 316

SEQ ID NO:1082

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01224

SEQUENCE DESCRIPTION:

GATCCAAATG GATTACCACT GTGCTACAGA CTTCTTATTA TAGAACAGCA TTCTATTCTA 60  
 CATCAAAAAT AGTTTGTTGA AGTTAGTTTT GGTACCATC TAAAAATATT TTAAATGTTT 120  
 TTTACATAAA AATTATGTT GTGTTTTAAA ATCCTTAGGG GCTTTATCTA TTTTCTAAG 180  
 TCAGTTAACT GTACTTCTAA AAAAAGTATT TTGTATCTAC TTTTGTAAC TCGTCAGAAT 240  
 AAAATATATT GAANGCAAA 259

SEQ ID NO:1083

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01225

SEQUENCE DESCRIPTION:

GATCGCTTCA CATNTATAAA AAAAATAANA ATACCCGGGC AAGCTTTCTT TGAAGNTGCT 60  
 ACAGCATTA ATATCGAGAA TTTTGGGTGG GAGAGAGCAG TTCAATTTT TTTACCAGCT 120

GAAGTTCATT TATGATACAA AAGAGATGAA ATGGAAGTGG CAATATAAGG GGATGAGGAG 180  
 GCATGCTGGC AACCCCTTCTT TTAAGATGTG CTCAATTTGT ATAANTGGTG TTTCATGNAA 240  
 TAATCATCTT GGAGGAAA 258

5 SEQ ID NO:1084  
 SEQUENCE LENGTH:342  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10 CLONE:HUMGS01226  
 SEQUENCE DESCRIPTION:  
 GATCGCCGCC CAGGGTTTCA CGGTCGCAGC CATCTTGCTG ACGTCTGNCT GNCAGTCTA 60  
 TGAAGTCTCG ACCCTAAGCC CAGGGTCTGG CCTTGAAAGC TCCGCAGAAA TGATTCCANA 120  
 15 ACCCAGGGAG CAACCACTGG CCCTACCGTG GGACTTACTC CCTCCTCTCC TTGAGAGGC 180  
 CCATGTGTCG CTGGGGAGGA AGTGACCNTT TGTGTAAC TGTAACCGAAA TTTTTCAAA 240  
 AATCCTAGAT GCTGTTGTTT GAATGTTACA TACTTCTATT NNGGCCACAT CTCCCNCTCA 300  
 CTCCCNCTGCT TAATAAACTC TAAAAATCCA CTTGTATTTA AA 342

20 SEQ ID NO:1085  
 SEQUENCE LENGTH:260  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01227

25 SEQUENCE DESCRIPTION:  
 GATCTAAGAA GANACTAGCC TTGTGGAGTA TATAGATGCT TTTCATTATA CACACAAAAA 60  
 TCCCTGAGGG ACATTTTGAG GCATGAATAT AAAACATTTT TATTTTCAGTA ACTTTTCCCC 120  
 CTGTGTAAGT TACTATGGTT TGTGGTACAA CTTCACTCTA TAGAATATTA AGTGGGAAGTG 180  
 30 GGTGAATTCT ACTTTTATG TTGGAGTGGA CCAATGTCTA TCAAGAGTGA CAAATAAAGT 240  
 TAATGATGAT TCCAAATAAA 260

35 SEQ ID NO:1086  
 SEQUENCE LENGTH:256  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01228

40 SEQUENCE DESCRIPTION:  
 GATCCTTAAT GTTTTGATTN TTGTTTTCTG AAATTGGATT TTATTTTATT TTATCTTATA 60  
 ATNNCAGTTC ATCTAAATTG TGTGTTCTGT ACATGTGATG TTGACTGTA CCATTGACTG 120  
 TTATGGAAGT TCAGCGTTGT ATGTCTCTCT CTACACTGTG GTGCACTTAA CTTGTGGNNT 180  
 TTTTATACTA AAAATGTAGA NTAAAGACTA TTTTGAAGAT TTGANTAAAG TGNNNGNNTT 240  
 45 TGCATTACAC CTCAAA 256

50 SEQ ID NO:1087  
 SEQUENCE LENGTH:254  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS01229

SEQUENCE DESCRIPTION:

GATCTTTAAA CTCTGGCTTC TTCCTCCTCA ATCTTGACAG AAAAAGGGTG CAGACGTCTG 60  
 GTTCAAAGAG TTGGATATCA AACTGATGG TGCAGTTAAC TTCCAGGAGT TCCTCATTCT 120  
 GGTGATAAAG ATGGGCGTGG CAGCCACAA AAAAAGCCAT GAAGAANGCC ACAAAGAGTA 180  
 GCTGAGTTAC TGGGCCCAGA GGCTGGGCCC CTGGACATGT ACCTGCAGAN TAATAAAGTC 240  
 ATCAATACCT CAAA 254

SEQ ID NO:1088

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01230

SEQUENCE DESCRIPTION:

GATCCATCCC ATTCACCCAG TGACTTCTTT TTGCCAGGC CGGGACTTTT TGCATCAGTN 60  
 ACGTTAACCA GATGACTTTG CCTGTAACCA AACCTCATGC ATCCACGTTT GCGTCTGGGG 120  
 AGGAATAAAA AGACATCGTT CCCGCTTCTN CGTTTTGTNA TTCCTACTGC CGCCATAGGA 180  
 ATTATTTCGT TGGCTGANGC TTACCAGCAC CCCGAGANCA CATTTTGATN GANTCAGAGT 240  
 AGAGGNCATG GCTGTNTTCT NAAAANGCCN CGCCATGNAA NTGCCAATCC CCTTTN 297

SEQ ID NO:1089

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01231

SEQUENCE DESCRIPTION:

GATCGCATTT TTGTAAAAGA ACCATGTGTG TTTATATGTG TTTATATATA TACTTGTGTA 60  
 TGCAAAGGTA AAAGTCTGAA AGGATATATG CTAAGTGTTC ACAATGATAA CCCCCAGGA 120  
 ATGGGATTGG AGGGGAGGGG GCTTCTGTGT TTGTNATGTA TGCTGGGTGG GANNTTGTGC 180  
 TTTTATTCT ATATTGTTG AATTTTTTTA CAGTATGTAT TATTTTGTGA ATAAAAATTT 240  
 TAAAAAATTC AAA 253

SEQ ID NO:1090

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01232

SEQUENCE DESCRIPTION:

GATCTGCCTT GAAATTTAAA AATCTAAATA GCTCTTAGTT GAACAGGGGA GATATAACA 60  
 AAGTTTGCAA AATTCCTAAA ACACGATGAT AATAAACATC ATACATCAGA NTTTTGAGAT 120  
 ATAATTAAG CAGTACTTAG AAGAAAATGT ATAGCCTTAA ATATTTAACA TCAGTAAAAAN 180  
 TGANAGGNTG AAAATTGGGA TTAAATTCC CAAGTCAAAG AGCTAGAAAN NGANTTACAA 240  
 AGCAAGNNGA AA 252

SEQ ID NO:1091

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01233

SEQUENCE DESCRIPTION:

GATCTCATGG GCTTTCCTGG AGGAAAGTTT TTTTGTTCG TTTTTTTTA AGACTTGAAA 60  
 CTTGTAACTG AGATGCTGTA GTTTTTTCCC ATCTGTAGTG ATGTAAAGAT TTAAACCTGA 120  
 GAGACTTTTN CTTTGTTAGA TTATGAGAAG NACTAGATGC TTTAGGTTTC ATTTCCCTT 180  
 AATTGCNATT CTTGTGCGCT NGTTGGGNGG GAACTGTTAT TTTCCNCAAT AAAAAGTAAG 240  
 TCTTATCGAA A 251

SEQ ID NO:1092

SEQUENCE LENGTH:250

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01235

SEQUENCE DESCRIPTION:

GATCATTAAA ATCAACGTTA TCTAAGACAG CTGTATCACA TTTTGGGAT ACATCATGGT 60  
 ACAGTCAGAA GCATATAAAA TTATGGTTCT GCTTGTCAAG CNCATACAGA ATCCAATACA 120  
 TTTTGACAAA CTGCCCATTC CTGCAAGTTA ATGCCCTTTT TGAAGCTTCA TTTCTCTTG 180  
 TAAAGTACAG ATAGGAATCA TTATTTGTG GAGTTGCTGT AAAGATTAA TAAAGGTGAA 240  
 TGAAAATAAA 250

SEQ ID NO:1093

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01236

SEQUENCE DESCRIPTION:

GATCCCAACA AAGATACAAG TGAAAACGCA GAAGGTCAAA GNGATGAGAA CAAGGACGAC 60  
 TATACAATCC CAGATGAGTA TAGAATTGGA CCATATCAGC CCAATGTTCC TGTGGGTATA 120  
 GACTATGTGA TACCTAAAC AGGGTTTAC TGTAAGCTGT GTTCACTCTT TTATACANN 180  
 CNAAGAAGTT GCAAAGANTA CTCATTGCAG CAGCCTTCCT CATTATCAGA AATTAAAGAA 240  
 ATTTCTGN 248

SEQ ID NO:1094

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01237

SEQUENCE DESCRIPTION:

GATCACTGNC AAAGTGGGAG CACTAAGGGG TGGGTGGGGA AGTGAAATGT TAGGCGATGA 60  
 ATTCCTGAGC ACCTTGTTTT TNTNCCAAGG TTCGTAGCTC CTCTNTGCCC TTCCAAGCCT 120  
 GTAACCTCGG AGGACTATCT TTTGTCCTTN ATCCTTTGTN TTGTTGAGT GGGNCAGCCC 180  
 CAGAGGAACT GATAAGCAA TGGCAAGTTT TTAAGGAAG AGTGGAAAGN NCTGCAANTA 240

AAANCCN

248

SEQ ID NO:1095

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01238

SEQUENCE DESCRIPTION:

GATCTCCATG CGGTCCCTGG AAGTACCCAT TGAAACATGC GTATTTGTGT ATAGCAGAAC 60  
 TCTGAAATAA TATTCTGACA GCAGTTATCT CTGAGGAATT GGGTTATAGG TGATTTTCCC 120  
 TTTCCGCATG ATAAATTTAT GTAATATTTG ACTGACTTGA CCGTAAGTAT GTTACTTGTA 180  
 TAATAAAAGG AAAAAAGGTA CTTCTATTTT GAAAAATAA AAATAAAAGC CTTTGGGTTT 240  
 TTGAAA 246

SEQ ID NO:1096

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01239

SEQUENCE DESCRIPTION:

GATCCTGTCA GGGNGTCCCC CATGCCTGGA AGAGGAGCTG GTGGCTGCCA GCCCTNGGGC 60  
 CCGGCACAGG CTTGGNCCTT CCCCTTCCCT CAAGCCAGGG CTCCTCCTCC TGTCGTGGGC 120  
 TCATTGTGAC CACTGGCCTC TCTACAGCAC GGCCTGTGGC CTGTTCAAGG CAGAACCACG 180  
 ACCCTTGACT CCCGGGTNNN NNNGTGGCCA AGGATGCTGG AGCTGAATCA GACGCTGACA 240  
 GTTCTTCAGG CATTTCTATT TCACAATCGA ATTGAACACA TTGGNCAAAT AAAGTTGAAA 300  
 TTTTACCACN TGAAG 315

SEQ ID NO:1097

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01240

SEQUENCE DESCRIPTION:

GATCCCGGGA GCCTTGCCGC ACTGCCCTGT GGGTGGCTTG GCGCTCGTAA TTGCTTCCTG 60  
 TGAACGCCCT CCAAGGACGA GCCCAGTGTA GTTGTGTGGC GTGAACCTCG CCCGTGTGTT 120  
 CTCAAATTC CAGCTTGGG AAATAGCCCT TGGTGTGGGT TTTATCTCTG GTTTGTGTTT 180  
 TCCGTGGTGG AATTGACCGA AAGCTCTATG TTTTCGTAA TAAAGGGCAA CTTAGCCAAG 240  
 TTAAA 245

SEQ ID NO:1098

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01241

SEQUENCE DESCRIPTION:

GATCTGCAGC AGCCGAAAAAT GCGTTNTGGT AAACCTGGCC TCAAATTCAT ACTACCATAA 60  
 CTGTTTTTAT ATATTGCCAC TAATTTTGAC TGGATTAAAT AGCACTTTAT TGTACANCTA 120  
 CAAAAAAAAA TATATNCCTA GAATNGTNNC CAGTGTAATT CCTCTAATGT CCTGGTGCCT 180  
 5 TTTCATATAT TTCCAGNATT TTNATACTAT ATNGGTATTT CTTTGTATA AATNGATNGA 240  
 TNAAN 245

SEQ ID NO:1099

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01242

SEQUENCE DESCRIPTION:

15 GATCTTAGGC TTTTCACTTT TTTTGTITG TTTTGTITTT GAAAGAAAGA AAAAAATACA 60  
 ATTAACAAGC CTCTTTTGTA AATGGGTTTC CTTTCTATGT ATAAATCGT GGTGGTCCCT 120  
 TGTITTTTACA TGTTCATGCT GTGTAATTTT GAGATGTTAC TGAGATATGT TCTGAACATA 180  
 ATGTGCATTT TTTNCTGTAC AGATGAAATG GGAGANTTTA ATAAAGAGTT TGCAGGTTTT 240  
 20 TNCTTGTTAA A 251

SEQ ID NO:1100

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01243

SEQUENCE DESCRIPTION:

30 GATCCAGCCC TGAGCATCAC CCAAGTGCCT GATGCCTCAG GTGACAGAAG GCAGGACGTT 60  
 CCATGCCGAG GCTGCCCCCT CACCCAGAAG TCTGAGCCCA GCCTCAGGAG GGGCCAAGAA 120  
 CCAGGGGGCC ATCAAAGCA TCGGGATTG GCATTGGTTC CAGATGAGCT TTAAAGCAA 180  
 ACATAGCAGT TGTGGCCAT TTCTTGCACT CAGACCTGTG TAATATATGC TCCTGGAAAC 240  
 CATCAAA 247

SEQ ID NO:1101

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01244

SEQUENCE DESCRIPTION:

40 GATCTTCCCT AAAGAGCAGN GGACCANATA NGAAGAGGAA AATTTCTACC TTGAACCGTA 60  
 TCTGAAAGAG GTTATTCGGG AAAGAAAAGA AAGAGAAGAA TGGGCAAAGA AGTAATCATG 120  
 TAGTTGAAGT CTGTGGATGC AGCTGTTATG AAGATGGTTA AACTTGAANC AAACAATTTT 180  
 45 AAGANTTATT TNGTCTGAAN GATGTTTTAC TTAAATAAA TGTCTCNTTG NAATGGCTGG 240  
 AGGTTTTTGG GNGCCAAACC NTTAAA 266

SEQ ID NO:1102

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS01245

SEQUENCE DESCRIPTION:

GATCCCAGGT CCCAAGGAGT GACAGGGGCT TCCTCCCACC TTCTGTCCTT GTCCAGTNAT 60  
GTAAATAATG TGCTTTTCCT CTCCCAGAGT CTTTTTTTTT AAAACCTACC GTGGTTCCTN 120  
AGCTAACTGC ATTCCCTACC CAGGCAGAGA CTGTCCTATG CCTCGNGCTT CCAAACGAGA 180  
CTCAGACCGC GACANAGCCA CCGTATTAT GGATTGCCAA ANTAANTAAN GCCCAAANCC 240  
ATCGGTCTCT GTGAAA 256

SEQ ID NO:1103

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01246

SEQUENCE DESCRIPTION:

GATCCTGGTG CTGGACAACG CTGCCATTGT CTGCAACTTT GGCAGTGAGC TCAGCCTGGT 60  
GTATGTGCCC TCTGTGCTGG AGAAGCTGGA CTGAGCGCAG GGCCTCCTTG CCCAGGCAGG 120  
AGGCTGGGGT GCTGTGTGGG GGCCAATGCA CTGAACCTGG ACTTGGGGGA AAGAGCCGAG 180  
TATCTCCAG CCGCTGCCTC CTGACTGTAA TAATATTAAT CTTTTTAA AAACCATAAA 240

SEQ ID NO:1104

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01247

SEQUENCE DESCRIPTION:

GATCTGGGCA GTNAGATAGT GCTCTATGCC TAAGGTGAAG CCACACTAGG NTGAAGCCTC 60  
ACTTCCCTGT TTAAGCAATG CAGTGCCTGC TGCCCGTGTG CANGAAGGTA CAGCCATTCA 120  
GATAAGTGGA ACTATTGAGT TACATAAAGA AAGTAGATT GCANTNNTCN GGCAGACGTT 180  
TATACANCAC CACGGTGCTT TTATACATTG TNCTNATTTT AATAAACTG ANGTTCTATG 240  
TGAAA 245

SEQ ID NO:1105

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01248

SEQUENCE DESCRIPTION:

GATCTGGCTT CCATTGGGCC CCCTCATTTT CCAAATGTTT AAATGTATTG GATTGGGATT 60  
CTCAATGTAT AAGTTGCCTT ATCTGTAAAT GTCTATCTTC TGTCTCTTA ATTTGTATA 120  
TCTGCTGTTT TGCTTTTGA TACATTTTCT AATTAGAAGT CACATGATAA ATATAATCAG 180  
TATAGTAATA ATACCATAAT GTGCACATAC TCAATAAATA AATGACTGCA TTGTTGTAAA 240

SEQ ID NO:1106

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01249

SEQUENCE DESCRIPTION:

GATCCATTN TCCNTGTAAC TNGGAGAAAG GCCAGTCCCT GTAACGGGGC AGCCCTCTCT 60  
 TTCCCTCGGT CAGCTCGTGT NAATCCTGGN ACCTCTCCG GTCGGCTCTG CCCGCTGTTT 120  
 TGGGGTCGAC TGCCACGACT TTNNATTCAA GAAGCTTCCT CCAGGCGGNA GCGGCTATTT 180  
 TCCCTAAATN AGAATTGTTA CATTGCAAAT NGTTGAATAA AATATTTNGC GGTCTTAAA 240

SEQ ID NO:1107

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01250

SEQUENCE DESCRIPTION:

GATCTGAAGA AATGATGGAA TGGGGAGTGT AGAGAAATGA GAGTCTGTAT GATTCTGGAA 60  
 CAGAGACATC AGAAGGAAAG ACTGGTGAAA AGATGTATCT TTGTATATTA ATAGCTGTAA 120  
 TGTAAGTTCC TGATGCTTGA CTAATTGAGG TGTTAATTCT GACTTGAGAA TCTTTTTCAT 180  
 GAATGATTTT AAAGAAAAAT TTGGATTTTA AAGGTATTAA AATATTTTNG TTTTGTAAG 239

SEQ ID NO:1108

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01251

SEQUENCE DESCRIPTION:

GATCCGCAGT CGAAAAAGAA CAAGCCACAG AAACGGGCTC GTCGTGCCAG GACACAGCAG 60  
 TGCTTTTCAA AAAATCAAAA CCAGAAGNTT TATCANCAGC AGGAAGNATG TGGGCTCTGT 120  
 CAAGTTCACC GTCACCATCA AGCCACTGCT GTGGAAGAGT TTGNCAACAG GNCAGTGTC 180  
 CAGCACANCT TCAGANGCAG CATCCGNGTG TCGTCCAACA GANGNCCTNG TCCGGTCAN 239

SEQ ID NO:1109

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01252

SEQUENCE DESCRIPTION:

GATCTATGTC CGGTGTGGGT TTTTGTCTC TCGAGTTTGT TCTCTAATAA AGGCCTTTTT 60  
 TGTTTCAAAT TACATACGCT TTTTACTGCA CAATTTTGT ATTGACCTTA TTTCAACTGA 120  
 AGCGATTATT TCCAGCAGGT TTAATTTTCA CAATAAGATA TATTTNAATA GTTTTACCTT 180  
 TCGCTAGAAT TTTGTATTGT TAAAAACAGT AAATGAATAA NTTTGCTGAT GATTCAAA 238

SEQ ID NO:1110

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01253

SEQUENCE DESCRIPTION:

5 GATCAATGAA ATGCACATAA ATNAACTGGT TCCATCAAGA CTGTGCACCC AGGCCTTACA 60  
 GTCCAACCTT TTTCTGTGTC TGGCTAATAT TTAAACTAG AAAAATTATT CCTAATCAAC 120  
 ATGGAGTGA GAGTTTATTC ACTGTCTTAT CTGCAGAAAT TTGCTGTCAA TATATAACCC 180  
 GCCTGCAGTG GAAAGTGTAT AGTGTTTTGT AATAAATGGC CTGATGCTAA TGTGTAAA 238

10

SEQ ID NO:1111

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS01254

SEQUENCE DESCRIPTION:

20 GATCTACCGG GGGCTATTAG TTTCAATGTA GTGATGAACA CAACTATAT TTTGAGTTCT 60  
 CTGCAGCAAG TGGAAATGTTG TATGAAAATA TCTGATATTT ACAAAGATGA TACTGCTAAG 120  
 TCAGAGTCAC GTTTATTGCT AATATGATGG TGGAGTGTG TCTTCATTCA TAATGAAGGG 180  
 AAATGTTATT TTTAATAGNG GTTAGTGAAA TAAAANTAAN CCTATTTTCT AANCAAA 237

SEQ ID NO:1112

SEQUENCE LENGTH:268

25

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01256

SEQUENCE DESCRIPTION:

30 GATCTGGAGC ATTTGAGCAA GTTTATAGAA GAACATGCCA CAAAAGTGA CAGGACCAAG 60  
 GAAGAGCTTT GAAGGCCTGA GGTCTGCGNA AGGTGGGAGG AGGCAGACGC CCTGCGTGGC 120  
 CCATGGTCGG GGCCTCCACG CCGAGGCCGG CAACAAACGA CAGTATCTCG GATTCCTNTT 180  
 TTTTTTTTTT AAATTTTNA AACTNNGGGG TTNCACTNCA NGNTCTGAAT ACTGANTANC 240  
 CATGAATNCC TGAATAGTTT AGNCCAGN 268

35

SEQ ID NO:1113

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01257

SEQUENCE DESCRIPTION:

45 GATCAGCGCT GAGGACGGNC TCAAGCATGA GTATTTCGCG NAGACCCGNN NCCCCATCGA 60  
 CCCCTCCATG TTCCCCACGT GGCCCCGCAA GAGCGAGCAG CAGCGTGTGA AGCGGGGCAC 120  
 CANCCCGAGG CCCCTGAGGG AGGCCTGGGC TACAGCCAGC TGGGTGACGA CGACCTGAAG 180  
 NAGACGGGCT TCCACCTTAC CACCACGAAC CAGGGGCCCTC TNCNGCGGGN CCNGGN 236

SEQ ID NO:1114

SEQUENCE LENGTH:235

50

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS01258

SEQUENCE DESCRIPTION:

GATCTGTTGA CTTCCCTGGG TAGGACACTG CCACCTCTGG GCTCAGGTCC TNATGCCTCC 60  
 AAATGGCATC TAGAGTTTGA GCAGCCTTCT TGGCTGCAAG GCAGGCCTAG CCTGTGGCAG 120  
 CGGGCTAGGG CCCGCAGAGC ATTTGGTGCC CCTCCATGTT GCAATGCAAA CACCTTCACC 180  
 ACTGGGGCAG TGGGGAGAGA TGGCTATATT AATAAAATAA CGTGTGTCTT TCAAA 235

SEQ ID NO:1115

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01259

SEQUENCE DESCRIPTION:

GATCATNATT TTNCTGCGT AGTTGACAGA CTTAGCATAT TAGTTTTNN TACTCCTACA 60  
 AGTGTAATT GAAAAATCTT TATATTAATA AAGTAACTG TTATGAAGCT GCTATGTACT 120  
 AATAATACTT TGCTTGCCAA AGTGTGGGN NTTNTTGTN GTTTGTTGT TTGTTGTTT 180  
 TTGGTTCATG AACAAACAGT TCTAGAAACC CATTTTGAAA GNGGAAANTT ATTAN 235

SEQ ID NO:1116

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01260

SEQUENCE DESCRIPTION:

GATCACAAAT NGCTTCATGA ATCAAGGTGT GGAAATGGTT ATATATGGAT TGATTAGAN 60  
 AATGGTTACC AGTACAGTCA AAAAAGAGAA AATGAAAAA ATACAATAA AAGGAAGAAA 120  
 CACAACITCA AAGATTTTC AGTGATGAGA ATCCACATTT GTATTCAAG ATAATGTAGT 180  
 TTAATAAAAA AAAANGGNA AANCNTTGT GNAANTNCCN CCTTNCCTC NGGN 234

SEQ ID NO:1117

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01261

SEQUENCE DESCRIPTION:

GATCCCCGN TCAGCNCNA AAGTGCTGGG ATACAGGCAT GAGCACCACG TCCGNCTAGA 60  
 CTTACCTTT CTAAAGAAAT TGTTACTGG ATTTATAAGA AGTTAATTT TGAAATNAC 120  
 ATATTTTGT NTGATAGAAA GAATGGAGCA AGTNGTGCCT ATTCCTCCA AGTCAGATAA 180  
 GGTTTCTAAA ATAAATAAAT TTCTAGCATA TAAAGGGTAG AGATAAACTC NNNN 234

SEQ ID NO:1118

SEQUENCE LENGTH:233

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01262

SEQUENCE DESCRIPTION:

5 GATCACAGGT CTCCCTGTG AACTTTGGTT TCTTTCTATA AATGIGTGTG GTTTTCAGCG 60  
 CTCAACTCCT GTCTTCAAAT GGTAGTAAGT NCTACTTCTA CTTCTGTCAT TCAGAACATT 120  
 TTATGTCAA TGAATGAATG CAGAAATNCT TGTGCATATT TGTAACTGAA GGAAGCTTTT 180  
 TAGATTTATT TNNGTTTTTA ATAAAATTCA GATTCCTATT CTAACTGGT AAA 233

10 SEQ ID NO:1119

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01263

SEQUENCE DESCRIPTION:

15 GATCTNCTAT GCAGTCTGC CATGCNTCCT GTTGGTCTCT CTGTGTTCTT TGTTACTTGG 60  
 GTGCAATAGC AACTTCCCTA CCCCCTGCAT TCCATCTTTN ATGTTGTGTA AAGTTCTTCA 120  
 CTTTTTNNCT TGAGGGCTGG GGGTTGGGGG AGTCAGCATG ATTATATTTN AATGTAGAAA 180  
 20 ATGTGACATC TGGATATAAA ATGAAAATAA ATGTTAAATT AAATGGAAAA 230

SEQ ID NO:1120

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01264

SEQUENCE DESCRIPTION:

30 GATCTAAGTT AGTCCAAAAG CTAAATGATT TAAAGTCAAG TTGTAATGCT AGGCATAAGC 60  
 ACTCTATAAT ACATTAAATT ATAGGCCGAG CAATTAGGGA ATGTTTCTGA AACATTAAAC 120  
 TTGTATNTAT GTCATAAAN TTCTAACACA AACTTAAAAA ATGTGCTCTCA TACATATGCT 180  
 GTACTAGGCT TCATCATGCA TTNGTAAATT TGTGTATGAT TTGCNNNTNT GNNNGNN 237

35 SEQ ID NO:1121

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01265

SEQUENCE DESCRIPTION:

40 GATCTGGCCA GTTGACTTT TAGCTCCCAG AGGGAGAGTT GGTGGTATTA TGAGTTGAGT 60  
 AAAAACCATC CAGGGGAAC TGAGGGAGCA GTCTGTTGCC AGTAATGTTT CTTGTGTGCC 120  
 ATTAACCAC CTCCAGATGA GTGGAGGAAC ATCACTTTT AATTTTTTAA TTGTATTTGG 180  
 45 AATTGTTGCC GTGTACTAAG AACTTGACCT AAATAAAATC CCACAAAGTA TAAA 234

SEQ ID NO:1122

SEQUENCE LENGTH:232

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01266

## SEQUENCE DESCRIPTION:

GATCCTCAGG ACGCAGGTCA CATTACCTG TGGGCAGAGG GACAGGTCAG ACACCCAGGC 60  
 CCACCCCAGA GACCCCTCCAT GAACTGTGCT CCCAGCCTTC CCGGCAGGTC TGGGAGTAGG 120  
 GAAGGGCTGA AGCCTTGTTT CCCTTGCAAG GGGGCCAGCC ATTGTCTCCC ACTTGGGGAG 180  
 TTTCTTCCTG GCATCATGCC TTCTGAATAA ATGCCGATTT TATCCATGGA AA 232

SEQ ID NO:1123

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01267

## SEQUENCE DESCRIPTION:

GATCAGGAGG CATCATTGAG GCCAGGAGCT CTGCCCGTAA CCTGTATCCC ACGTACTCTA 60  
 TCTTCCATTC CTCGCCCTGC CCCCAGAGGC CAGGAGCTCT GCCCTTGACC TGTATTCCAC 120  
 TTAATCCACC TTCCATTCTT CGCCCTGTCC CCACAGCCGA GTCCTGCATC AGCCCTTTAT 180  
 CCTCACACGC TTTTCTACAA TGGCATTCAA TAAAGTGTAT ATGTTTCTGG TGA AAA 235

SEQ ID NO:1124

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01268

## SEQUENCE DESCRIPTION:

GATCGATGCC ACGTTCGTAA GGTTCCTAAGT CTTTCTTGGC TCCTNATGTG GTCCTCTCTC 60  
 TCGGAAGAAC TGCCAGCCA CGGGTTTNA ACCCACCTGT TGCTCCTNAG GTCGTCATA 120  
 TATCAACAGT CACAAACCCA ATGGCAATAA AGGCACTGAC GATAGCTGGC GCGCGCNACG 180  
 CCACACACCA TTTTNAGATG CCGTTGCAAT TAAATCTTGC CACACTGTCC TCCTGAAA 238

SEQ ID NO:1125

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01269

## SEQUENCE DESCRIPTION:

GATCCCTGGC TGAATGTCA TACCATTGAC CCATTTGAAG AGTTAAAGCT GGATTTGACT 60  
 GCTCTATTCT ACCAGGAATA TTGTTAGGT AGCCTTTTAC CAGTTTCTAA ACANTNGTAA 120  
 TCATTTATTG ACTCAGCAAT TCCTCAGATA ACAGGTCAAA AGATGTACAG ATACATTCNN 180  
 NAGTTTTCTT GCTATTAAAG GCACAAGAGT TTCCTTGAT TTTGACTGAA A 231

SEQ ID NO:1126

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01270

## SEQUENCE DESCRIPTION:

GATCTACAGT CATGCTTTAG CATGGCTATG GAGCTAATTA TCAAGCTTAA AGGGTAACTT 60  
 TGGGAGGACT CCTCCCTTCA CTCCTAGTCT CCCTTGAAG AGCAGTCCAG GCTCAGGGAA 120  
 GGGAAATGGAT AGGATGACAC AGTAAGTACA GAAACTGAAG CTGTCAATAG TGAAGGAAAA 180  
 AGGGGAATTC TTCGTTGCTT TGGCATTNAC ACATAAGTAC TTTGATTAAA 230

SEQ ID NO:1127

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01272

SEQUENCE DESCRIPTION:

GATCCAAAAA TTATAGCATT CTTCTACCAC CACAGGGGCT CATATGACAT TAACAGACAA 60  
 GACACTTTT AGAAAGACAG GTTGTCTTTT TGGGCCACAT CTAAGAAATC TTTGTCTAGC 120  
 CAAAAGCCAC AAATAATTC TCATTTTTTG GCTTCTGGAA GATGTACAGT TAAATGTTAT 180  
 ATTTGGGACT GTTATCTAAT TTGATTAAAT TGCACCTAC AATATGAAA 229

SEQ ID NO:1128

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01273

SEQUENCE DESCRIPTION:

GATCAGGGCT GAGGGTAAGG AAAAGAAGAG ACTAGGAAAG CTGGGCCCAA AACTGGAGAC 60  
 TGTTTGTNTT TCCTGGAGAT GCAGAACTGG GCCCGTGGAG CAGCAGTTTC AGCATCAGGG 120  
 CGGAAGCTTA AAGCAGCAGC GGGTGTGCCC AGGCACCCAG ATGATTCCTA TGGCACCAGC 180  
 CAGGAAAAAT GGCAGCTCTT AAAGGAGAAA ATGTTTNAGC CCAGTCAA 229

SEQ ID NO:1129

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01274

SEQUENCE DESCRIPTION:

GATCCTTACT ACTGGAATTA CCGGGTTAAA AGGAAATGCT TACCACTAAG ATGTCAGTAT 60  
 TCTCCTCATG GATATTTTCA ATCTCAATGT TGCCAGTCTA ATAGTATAGT ATGTGGTTGC 120  
 TTTACTGCTG TTCTCCCCAC CCCCGTGGAG TTGTGTCATT ATTTAATGA ATGTGAGCTC 180  
 TTGACTTACT CTAGAATTCT AATACAGATA CTTTCTGCAC TAGTAAA 227

SEQ ID NO:1130

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01276

SEQUENCE DESCRIPTION:

GATCCGCTTG GTGACGGGCG TCTTCCCAGA TGCTGGCGTC ACCGCTAGAC CAAGGAGCCC 60

TCTGGTGGCC CTGTCCAGGC ATAACAGAAG GCTCGCACTC CTGTCTTCTG GTCACCTTCTC 120  
 ACTATGTCCC CTCAGTCTCT ATCTCTGTAT GGCCTGGTTT TTCCTAGGCT ATGATTATTG 180  
 AGTGAGGATT ATCATAATAT TGGAAATAAA AGTAATTGCT ACCCAAA 227

SEQ ID NO:1131

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01277

SEQUENCE DESCRIPTION:

GATCAGGATT GTCCTACAGT TGTAAATAAG ANTAGGTCCT GTTTATTTTG ACATCTNTTT 60  
 ACAAATGCAT TGTATTAGGG TGTGAATATT CTGAACCATC CTCTTGTTA AAGTTTGGAA 120  
 ATTTTATTG TTAATGTAA CATTTAATG GTTGAATAA TTATTTGTAT AGATATGAAT 180  
 ATAGTATTTN ATTTAAGANA ATAACTTTG CATTTTGTCA TNGTAAA 227

SEQ ID NO:1132

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01278

SEQUENCE DESCRIPTION:

GATCTGAAAT TTGTGTATNC TAAAGTAATT TNGTTTTATG TATTGGAAGT TCACTTAAAA 60  
 ACTGGAAATA TTTCTAGAA GGGTACCACA CAAAAGGAAT CATCTTTAAG CTGTTTAAAT 120  
 AACCTAATAA AATAATNTGA TGGGGAAGGC ATTCTAATTG TTTCTGATT TNNGAGTGGT 180  
 TCCTGCTAAN TCATCANTAT CANTACAGCT TGATTTGATT TAAGAAA 227

SEQ ID NO:1133

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01279

SEQUENCE DESCRIPTION:

GATCTTAAAT GTTATATTGA TAACCATGCT CAGCAATGAG CTATTAGATT CATTTTGGGA 60  
 AATCTCCATA ATTTCAATTT GTAAACTTTG TTAAGACCTG TCTACATTGT TATATGTGTG 120  
 TGACTTGAGT AATGTTATCA ACGTTTTTGT AAATATTTAC TATGTTTTTC TATTAGCTAA 180  
 ATTCCAACAA TTTTGTACTT TAATAAAATG TTCTAAACAT TGCAAA 226

SEQ ID NO:1134

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01280

SEQUENCE DESCRIPTION:

GATCTTTACC AAATTCCTGA CTCAGAGTTC CTCCCATTTN CTTCTGACTC TCATTTTATT 60  
 CTTACCTCTC ATTTTATTCT TATGATGTTT ACCATTTCN TTCTCCTCAG TGTCCCTCTC 120



TGAGTGGTAA GAGTATGTTA ATAAGCCAGT NCTGAGACCG GAGCACGAGG CAACTGCTCA 180  
 ATGTTGGTCA TTGTCAGTGT TATTAAATGT AACTTAAGGG NNAAG 225

SEQ ID NO:1135

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01281

SEQUENCE DESCRIPTION:

GATCTGACTT AAAAACCAC CAGCATGCTC AATCCCTTGT NATCCTTATG GAATCTGTAT 60  
 GTTAACTCTC TGGGTGTTCA GGCTTCTATT TGACTGCTGT TGTNACCCTG TTTGCAAAAT 120  
 GAATATGACA CTCTGTGGAT TATTTNCTCT GTAAGGCACA AGTNCTTCTN ATGATTANTT 180  
 TGACGTTTCA NGAGCAAAAG CAAATTNANA CTCTCTTCAG CAAA 224

SEQ ID NO:1136

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01282

SEQUENCE DESCRIPTION:

GATCCAATAG GAGACACCAG TTCCTTGACT GANCCATGCC CCCACCTAAG TNACAAAATG 60  
 AGGGAAGTGG GGAGTTAGAT TTCAGAGTCC AGGCCCTAG GTTGGGACCC ACTCCAAATA 120  
 ATCTCCTCGG TGTGGGTNGT GGTCTATAG AGGNATANAT GAATAATAAA CATTGTAAAA 180  
 NTATACGATA ATGNATAAAG TAATCCTTTC ATCANNTGTG AAA 223

SEQ ID NO:1137

SEQUENCE LENGTH:222

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01283

SEQUENCE DESCRIPTION:

GATCCATCCG ATGGCCTACC AGCTGCAGCT CCAAGCCGCC AGCAACTTCA AGAGCCCACT 60  
 CAAGACGATT CGCTGATTCC CTCCCCCACC TGTCTGCAG TCTTTGACTT TTCCTTTCTT 120  
 TTTTGCCACC CTTTCAGGAA CCCTGTATGG TTTNAGTTT AAATTAAGG AGTCGTTATC 180  
 GTGGTGGGAA TATGAAATAA AGTAGAAGAA AAGGCCATGA AA 222

SEQ ID NO:1138

SEQUENCE LENGTH:432

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01284

SEQUENCE DESCRIPTION:

GATGCGACAT CCCTGCGCCC CCATGCCCCC ATGCCCTCT GAGTCACACA GGACAGAGGA 60  
 GGCAGAGCTT CTGCCCCTG TATCTTCAC TTTCTTTGTC CAGTCTTTTG TTTTAATAA 120  
 GCAGTGACCC TCCCTACTCT TCTTTTAAAT GATTTTNGTA GTTGATTGT CTGAACTGTG 180

GCNACTGTGC ATTCCTTGAA TAATCACTTG TAAAAATTGT CAGTGCTTGA NGCTGTTTCC 240  
 TTTACTCACA TTGAAGGGAC TTCGTTGGTT TTTNGGAGTC TTGGTTGTGA CNCAAGAGC 300  
 AGAGTGAGGA AGACCCCAA GCATAGACTC GGGTACTGTG ATGATGGCTG CAGTCCAGTT 360  
 TTTATGATTG TGCTTTTAT GTGTCCCTTG ATACCAGTGG NCTTANCAAT TATACATTNC 420  
 CTCATANTTA AA 432

SEQ ID NO:1139

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01285

SEQUENCE DESCRIPTION:

GATCAGACCC AGAGAAAAGT AGTTGTCACT CATAGCACAC ATCGGACATT TGGAAAACAG 60  
 CAGTGGCAAC AACTGTATGA CACACTTAAT GCCTGGAAAC AAAATCTGAA CAAAGTGAAA 120  
 AACAGCCTTT TGAGTCTTTC TGATACCTGA GTTTTATGC TTATAATTTT TGTCTTTGA 180  
 AAAAAAGCC CTAATCATA GTAAAACATT ATANNCTAAA 220

SEQ ID NO:1140

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01286

SEQUENCE DESCRIPTION:

GATCTTGGGG CCTGTTTTCC CATGGGATTC AAGAGGGACA GCCCCAGCTT TTTTGTGTTT 60  
 TAAGCTTAGG AATGCCTTT ATGGAAGGG CTATGTGGGA GANTCAGCTA TCTGTNTGG 120  
 TTTTTTGAG ACCTCAGATG TGTNTCAGC AGGNCAGAAA NCTTTNTNC TTTAATAATG 180  
 AGAAATGTAT ATTTTACTAA TAAATTATTN ACCGAGAAA 219

SEQ ID NO:1141

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01287

SEQUENCE DESCRIPTION:

GATCTAGAGA CAAAGGATAC TCAATGAGGA GCTTTTTTCC CCTCTTGAA CAGGTAAAAT 60  
 GCTTTTCTT ATTAATATAA TTATAAACA GTATTTTATG TAACAGCTAT TCCCATATTC 120  
 TAGGAGTGGC CTAAGAAATG CGTGTTCAG TGAAGTATG ATAAATATNC TCTATTGTGA 180  
 ATAGTTGAAT AAAACAGCTG TTTTCTCTG CTTCCTAAA 219

SEQ ID NO:1142

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01288

SEQUENCE DESCRIPTION:

GATCTGTGAA ATGCTATCTC TCCTGANGCA ATACTGTTGA CCAGAAAGGA CACTCCATAT 60  
 TGTGAAACCG GCCTAATTTT TCTGACTGAT ATGGAAACGA TTGCCAACAC ATACTTCTAC 120  
 TTTTAAATAA ACAACTTTGA TGATGTAAC TACCTTCCA GAGTTATGGA AATTTTGTCC 180  
 CCATGTAATG AATAAATTGT ATGTATTTTT CTCTATAAA 219

SEQ ID NO:1143

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01289

SEQUENCE DESCRIPTION:

GATCCCTGGA CACTTACGTA CAATGCTTCG TNCTGCCTGA TGACAGCCGG GCCAGCCGCC 60  
 AGCNTACAAG GNTTGTNCGA CGCAGCCTCA GCCCTGTNTT CAATCACACC ATGGTGTACG 120  
 ATGGCTTTGG GCCTGCTGAC CTGCGCCAGG CTTGTNCCGA GCTCTCCCTC TGGGACCATG 180  
 GGGCCCTGGG CAACCGNCAG NTNGGGAGGC ACACGCNTN 219

SEQ ID NO:1144

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01290

SEQUENCE DESCRIPTION:

GATCTCGGTG CTTCTTCTCG TGCTGTGGTT TACCCCAAAC CTTAGGTTG TTTATTCATT 60  
 CAGATTAGAT AGACTGGAGC CATAAAGTTA ATTTGCACCT AGCTTTTTGG AGAATAGCCA 120  
 TGATTAAC TGATTCTGTTG TGGGGGTGGG GGGGAACCTT ATGATTACT ATGCAGATGA 180  
 AGAGGGTAGG AACTAAATAA AGGACTTTGT AAGCCAAA 218

SEQ ID NO:1145

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01291

SEQUENCE DESCRIPTION:

GATCAAGAGG GAGTTCATGC AACACCTGAG AATCTGATTA ATGCACTGAA TAAGTCTGGA 60  
 TTAAGTGACC TTGCAGAAAG TCTAACTAAT GACAATGAGA CAAATAGTTA GCTTCTTTTT 120  
 TTTTCTTTT TATTAAANCT GNGATAGATT TTNTTACCAA GCAGCATTG ATAAGAGGTC 180  
 CACTGGTTTT GGTAANCAAT AANCATTTTT ATACCAA 218

SEQ ID NO:1146

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01292

SEQUENCE DESCRIPTION:

GATCCCCAGC TGTATTGCA TAGATAATCT CTCCATTCCC GTGGAACGTT TTTCTGTTC 60

TTAAGACGTG ATTTTGCTGT AGAAGATGGC ACTTATAACC AAAGCCCCAA GTGGTATAGA 120  
 AATGCTGGTT TTTCAGTTTT CAGGAGTGGG TTGATTTTCAG CACCTACAGT GTACAGTCTT 180  
 GTATTAAAGTT GTTAATAAAA GTACATGTTA AACTTAAA 218

SEQ ID NO:1147  
 SEQUENCE LENGTH:217  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01293

SEQUENCE DESCRIPTION:  
 GATCCTATCC AGTTGAGGAA TGCTTGCAAT GCTCATTGAA GGGATTGCT TTGGGACTTT 60  
 GTCATCTTCC AGAAAGGAAA CATATTGTAT ATTTGGCCCA GTGTGATTGA TTGCTTTATC 120  
 TTTGGTAACT TTACTTGAA TGGGATTGCG TGAATTAATG ACTATTGAAT TAAAACTAA 180  
 TTATGAGTTG ACAAATAAAT AAAAGGTAGT GTTTAAA 217

SEQ ID NO:1148  
 SEQUENCE LENGTH:217  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01294

SEQUENCE DESCRIPTION:  
 GATCATAGTC AGAAAGTACT GCAGTTAACA GGAACCTTCT TGTCAGGCT GTCATAGCCA 60  
 CAGTTGCAAA AAGTGCAGTA TTGATTAATG CAATNAGTGC AATNAGTGAC ATCCTGAGTC 120  
 TTTTATCTGT TNAGCTTGCT NTNCTNTTCT NTCATACATC AGGATATTGC CTGTAATGTG 180  
 GAGTGGACAG GATAAAAATA AGNATTTTAC TTTCAAA 217

SEQ ID NO:1149  
 SEQUENCE LENGTH:124  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01295

SEQUENCE DESCRIPTION:  
 GATCTGAAGA AAGCTTTTGG TGCTTGTCTT CACAACCACC TCAGTCTCTC CTCCCTGTCC 60  
 TCCCCTGTCT CCTTCTCTCC TCCTGGGTTT ATGTTGTAAT AAAAGAAGAT TGTTGGTGTG 120  
 TAAA 124

SEQ ID NO:1150  
 SEQUENCE LENGTH:215  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01296

SEQUENCE DESCRIPTION:  
 GATCATAGCT TGTTTTATTT TGTGCTATAA AATTAACAGT ATTAAATGAC TTATATTCTT 60  
 AGAATACATC GAGTGTCTTT TCTTAACAGA TTAGTGCCCTT TTNATTTTGG TATTCCGTTT 120  
 TACGTTACTG GTCCCAGCAT CAAAACCTTT GTTCCATGG CCTGTTTGTA TATTGTCTCA 180

ATAAACTTG CATCAGCCGG TGGTGGCGGC AGAAA

215

5

SEQ ID NO:1151

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01297

10

SEQUENCE DESCRIPTION:

GATCATAGTG TTTTGAATC ATTTAATGTC TGCAGCCAAA TTTTAAGGG TAATTTAGAC 60

CTAATACTGC TCTTGCTGTG TCTTATTAAG TTAAAATTAA TGAATGANTN CTGGTAAAAA 120

TTCANNNGG CACTCTGTGA GTAGAGAGTA TCATTTAAGC TTATTNAGT CACATGTAGT 180

15

ATATATCTCC TTAAAGCTGT CACTCTCACT TTNCTTACCA TTCTCTGAT TTNNTCAGAA 240

NCCATCTAGT CATCATCTTT ATACTCTACC TGCTTCTGCA ATTGTATATC ANATNGNGN 299

SEQ ID NO:1152

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01298

20

SEQUENCE DESCRIPTION:

GATCAAGTT TAATTGCTTC ATTTTGTGTT AAAAAGGGAT ACTGATGTCA GAAAATCTGT 60

25

AATATGTTTT ATTCAAAAGA TGTAATAAT GTATACAGAC TTGTATGTGA TGGGATGGGA 120

AATATTTAAA TNCTAGGTGT TTTTTTTTTT TTNAANGNGG AACCNCAATG TTTATAGGAA 180

AAAANTGATT AANTNGTTCC GTTTGGCCNT GAAA 214

30

SEQ ID NO:1153

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01299

35

SEQUENCE DESCRIPTION:

GATCCCTCTC CTCGCCTGCC TTCTGGAAGA CTTCAGAAGA TTGAGCCTCA CTGGTGCCAG 60

GAAGCCAAAG CTTACTTTGT AGAACTGACA CTAACCTACC CGAAGACTTA GGTGCTTTGT 120

GTACTTAACC CCAGGACCTN CTTACTTTTT AATATAAAGA GTGATGTTGT ATTTCGTGTT 180

40

CTGCACTTTT TAATATAAAG AGTGATGTTG TAAA 214

SEQ ID NO:1154

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01300

45

SEQUENCE DESCRIPTION:

GATCCCAAAG CCACGCTCAT CCAATCCTGG NGAATCATTT ATTTTGAATA TAGACCATTG 60

50

AATAGGTGAA AAATGGAAAA GTCACTTTTT GTACATTTGC ATTCCTTCAA TAATGATTAC 120

CATTTGTNCA CATATTTGTT GACCATTTGA ATTGATTTTA GCACAGTGCC TAAAAATAG 180

55

TAGGTGCTCA ATAAATATTT GTTAATTGAA TAAA

214

SEQ ID NO:1155

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01301

SEQUENCE DESCRIPTION:

GATCCAAACT AATAAGAATA AGCTGTACAG GAACTAGTGC TCAATATACA TTGTATAAAT 60  
 TTGTGGAAAT CTCTTGGATG TNAATTGTTA CTTCAAGTGG CTTTTATTAA GATTTNCTCA 120  
 GACTTACTTG GAGGTTAAAG CAAACCCAAA TGTGTATTAT TTGTACAG AGCTCTGCTT 180  
 TATAATTTG TAATAAAGTT TCAATACAGA CAAA 214

SEQ ID NO:1156

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01302

SEQUENCE DESCRIPTION:

GATCGCAGTG GAAGAAGATT AGTGCATCAT TGAGAGAGGA GAAGTGGAGT GTGGGGTGAG 60  
 CAAAAGCCAA AATACTAATC ACTAGTACAC CAGAGATGCT CCACAAGGTA TGCTCCCCAC 120  
 GGTTCCTTCT CAATTTCAAA GGTNAAGATG TTTTTTGTG GTGATATAAA ATTTATTGTG 180  
 AATACTTGGT CCATNAAATT GGTACTTGCT AAA 213

SEQ ID NO:1157

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01303

SEQUENCE DESCRIPTION:

GATCTTGTG AGGCATTTAG CTGCCATGCA CCTGTCCCC TTTAATACTG GGCATTTTAA 60  
 AGCCATCTCA AGAGGCATCT TCTACATGTT TTGTACGCAT TAAAATAATT TCAAAGATAT 120  
 CTGAGAAAAG CCGATATTTG CCATTCTTCC TATATCCTGG AATATATCTT GCATCCTGAG 180  
 TTTATAATAA TAAATAATAT TCTACCTTGG AAA 213

SEQ ID NO:1158

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01304

SEQUENCE DESCRIPTION:

GATCTCATTT CAATTCTTT ATTAGAGGGC CTTATTGATG TGTCTAAGT CTTCCAGAA 60  
 AAAAATATC CAGTGATTTA TATCTGATT TCAACCAGTC ACTTAGCTGA TAATCACAGT 120  
 AAGAAGACTT CTGGTATTAT CTCTCTATCA GATAAGATT TGTTAATGTA CTATTTTACT 180  
 CTTCAATAAA TAAACAGTT TATTATCTCA AA 212

SEQ ID NO:1159

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01305

SEQUENCE DESCRIPTION:

GATCTGGTCT GTTCCTGCGT CTGCGGGANGG CCCTTGCTC CCAGCTATCT ATAACCTTAG 60  
CTAGAGTGTC GCCTTGTTGGG TTCCTGTTGC TGAGACTTCC TGGATGGAGC CGCCTCACCG 120  
CCGGGCCCCGT GGCCTGCNCG GANTGTGTCC AATAAAGTTC TTGGATGTGA AAACCTTAACA 180  
ATTTTGTGTA ATAAAAATGG AGAAGCTCTA AA 212

SEQ ID NO:1160

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01306

SEQUENCE DESCRIPTION:

GATCCTTGGT GTGTAGTTCA GTCTTGCACT ATACAAGCTT TTGTGTATAA ATGTTTTATG 60  
ATATGATTCC CTGTATTTTG CAGGGGTTTT TTTCTCTTT NCTTTTAGA TAAATATGTA 120  
TATCAATATT TAAATNCAT CTTTGCTTT TTTAGAGGAG TTTGTAATCA CCTTATAACA 180  
TGAAAAATAA CATTTCCTTT TTAACATCAA A 211

SEQ ID NO:1161

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01307

SEQUENCE DESCRIPTION:

GATCCTGTAT ATGTGTGTTT TGGGGGAGCT ATGATAAGTT TTATGGCAA CGGTTGGTAT 60  
TGTTAACTTT TTATTGTCAT CAAAAGTTCA TAAAAGTCCT ATTAATCCCC ATATTCTNNN 120  
NCTGCCCTTA ACTCTGGTAT ACACCAAAAA GAAATCTTA CTTTCCTTGT TTTATCATT 180  
TAAAAATAAA GTATTTTGCT AGTATGGAAA 210

SEQ ID NO:1162

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01308

SEQUENCE DESCRIPTION:

GATCCGCCCA TGTNAGCCTC CCAAAGTGCT AGGGTTACAG GCATGAGCTA CCATGCCTGG 60  
CAACAGCTTT CATATTTGTA AGTTTTTTTT CCTAGGTAAC CCAAGGTCTA TTGAAATTNC 120  
ATATAGCTTT CTTTNCATTT ACATATTTAA ATAGATTNN CCTGATTNA GAAAAGCTGT 180  
AGATTTTAT ATGTNAATCT TGTNTCCNTN 210

SEQ ID NO:1163

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01309

SEQUENCE DESCRIPTION:

GATCTNGGAC TCTNCCTCTC ACGACTGCGC CTTAGTCACT CAGACATACG GCGCANTGCA 60  
GGAAAAGCCT ACACAGACGA CCTGGGTGCT GTGGGTGGCG CCTGCNTGGA GGACGAGCCA 120  
GCNTCCTGCN CTGGATGAGG ACAGCGAGCA CCCGCCATNA TTCTNCGGAC TGA CTGAACT 180  
TNACCTGTGA CCTCTTACCN GTGGAGCAN 209

SEQ ID NO:1164

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01310

SEQUENCE DESCRIPTION:

GATCACTNCA GGCCAGGNGT CCAAGACCAG CACGNCCAAC ATGGCAAAAC CCAGTCTGTA 60  
CTAAAAATAG AAAAATTAGC TGGGCGTGGT GGCCTGTGCC TGCAATACCA GCTACTCAGA 120  
AGGCTGNAGC AGGNTAATTG CTTGANCCTG GTAGGTGGAG GTTNCAGTGA GCTGANATCA 180  
TGCCACTGNA CTCCAGCCTG GGTNACAGN 209

SEQ ID NO:1165

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01311

SEQUENCE DESCRIPTION:

GATCCTTACC GTCCTAGAGA GCAGACGCTT TCTGAAAAC ACTTGCTCCA AAAGACCCTC 60  
TGAGTTAACG TTTCAGCTGT ATCATTAGAC TTGTATTTAG AGCGTGTAC TTCTCTGAA 120  
CTGTACTGCT CTGAATGGAG TCCTGGACGA CATTGGGTTT TTCCTCTAGG AGAATACAAG 180  
CCTTAATAAA CAATACTATT TAGCAAA 207

SEQ ID NO:1166

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01312

SEQUENCE DESCRIPTION:

GATCTGAACA AAGTCTGCAT TTNGTTAATA GTGTGGTACC AATGTGGTT TCATAGTTTT 60  
GGCCATTGTG CTGTGTATTT ATAAGATGCT AACATTAGGG ATAGCTGAAT GTGGTATATA 120  
TAGGAACTCT GTGCTGAGTT TATAACTCCT CTGTATGTCT AAAACTATTT CAAAATAAAA 180  
NGTTTAAAGG TAAAANAAAA GATTAAA 207

SEQ ID NO:1167



SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01313

SEQUENCE DESCRIPTION:

GATCCAGCCA CCACTCTGAA ACTCATCACA TCTTCATTGA CAGGGAGGGA GCCCAGGACA 60  
 TATGTGTGGC TCATTGACCA GAAGGCTTTC TTAGTCCCAA CAGCCATGAA CCATGCACTT 120  
 ATGGATACCC AGCCTTTTAG GGCTACGTGA AATGCATCCT TGTANCATCA TTGTATTCTT 180  
 TCAATAAATA GCCTTCTGAG TTGAAA 206

SEQ ID NO:1168

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01314

SEQUENCE DESCRIPTION:

GATCTGCGTG CCTATNAGAG CTTTGAGAAG CTCCGCCACA TGCTACTGTT GGCTATCCAG 60  
 GAGTGCTCTG AAGGCTTTGG GCTGGCCTAA TAAGGCCCTG CCCAACTCCG TGGGGTTTTT 120  
 TTAACCATTG TTGGACCTGG GGAGGGGGGA GTTAAAAAAA GAACCAGAAA GAAATTGTCA 180  
 AAAACCAATA AATGAAATCC ACCAACTCAC AAA 213

SEQ ID NO:1169

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01315

SEQUENCE DESCRIPTION:

GATCTAAAGT GACCTTGATG GACAGTGGAA GAAATCACAA CATGGAATTC CTCGAATAAC 60  
 AATTTATTGA CTTTAAATAA TTTTGTCTAA TGCTACATAT ACACAATTAA AAAACCTTTA 120  
 CACTATTTCT AGAAAGTCAG CATGTATTTT TGGCTCGNNG TTTNCNCGG TGTTTTCTGT 180  
 GGAAGGAATA AAAATTTGAG TTTCAGTTGT GTAAA 215

SEQ ID NO:1170

SEQUENCE LENGTH:349

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01316

SEQUENCE DESCRIPTION:

GATCTGTGAC AGCAGCAGCT TCATGTTGTA TTTTTTTTAC TGAAATTGTA AAATATCCAT 60  
 CTTAAAGACA TCAACTATTC TAAAAANTGT TTACAGGATA TTCCTTTAGT GGTGGAATTA 120  
 AAATNTACGA NTACTTGCTT TTTCAAAAAA ATGTATTTN TGTTAAAAAGT TTAAAGATT 180  
 TTGCTATATA TTATGGAAGA AAAATGTAAT CGTAAATATT AATTTTNTAC CTATATTGTG 240  
 CAATACTTGA AAAAAACGGT ATNGAAAGTA TTTTGAGTCA GTGTCTTACA TGTTAAGAGG 300  
 GACTGAAATA GTTTATATTA AGTTTGTATT AAANTTCTTT AAAATTAAA 349

SEQ ID NO:1171

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01317

SEQUENCE DESCRIPTION:

GATCCAAGCT GTATATACCA TATATAAACA TTTTACATGA ATCATTAGT TTTTAAATTC 60  
 ATTTACTAAT GCTATAAAAT TTCCTATATT ACCCCAGTAA TTTGCATCAG CTGGTTTATA 120  
 TACTAAAGCA ACATGTTTTG ATGAGTTTCT TACATCCTTA TCGAGGAATT GGGTTAGGAA 180  
 AAAATACATA ATGTAAAAAC TGAAA 205

SEQ ID NO:1172

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01318

SEQUENCE DESCRIPTION:

GATCTTCAGG NTTCTACAAA TAGGGTAATT GTAAATTAA AGCATTAGCA TTTATTGGTG 60  
 AATAATGTAT ATATCCCAT TCCAAGAAAT ATAAGTNAGT NANGTTGAAA TAAAATCTTT 120  
 AAAATTTACT ATATTGCCAG TGGTTTCACA NCAGTTCTCT TGTATTATT TATCAATTAA 180  
 ATCAAATAAA AATGATTATG TCAAA 205

SEQ ID NO:1173

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01319

SEQUENCE DESCRIPTION:

GATCCCTGA CCTGCATTAC CTGGTAACC ATTTCATTTT TTAATTAAAT TTCATTTTTT 60  
 AATTTGGTG TACAAGCTGT AACATTTCAT CTTCAAAGT GTAACACGCT GATTTCCTCA 120  
 AATAGAGATA CCCCTTTGAG TGATAAATTT GCAAAATGCT GTCTTCATTT TCTGTATTAA 180  
 AATTCATTTT AGTTTTAAAA TAAA 204

SEQ ID NO:1174

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01320

SEQUENCE DESCRIPTION:

GATCAGAGCT GCTGAGTTCA GGATGCCTGN GNGTGGTTAG GGTAGCTTCT TACATGGATG 60  
 TCAGGAGAGC TGCTGCCCTT GGCGTGAGTG CGTATTCAGG TGTTTTGCTG CTTTGGCAGA 120  
 GAGTGGTTGA GTGTGAATC GTTCAGCTCT NAGGTTCTGT NCCCTGTGGT GGAGAGGACG 180  
 CAGCAGCNAN NTCTGGGNTC TNAN 204

SEQ ID NO:1175

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01321

SEQUENCE DESCRIPTION:

GATCAGTGCT CTCTATTGAT GTTCTTGCTG GTCTCCAGNC ACATTCCTGT TGCATTAAGN 60  
 CTTGAAAGAC TTGTAGATGT GTGATGTTCA GGCACAGGAT GCTGNAAGTA TGTTACTATT 120  
 CTNAGTTTGT AAATTGTCCT TTTGATACCA TCATCTNGTT TTCTTTTGT AGGTATAAAT 180  
 AAAANCACTG TTGNCANTAA GGAAA 205

SEQ ID NO:1176

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01322

SEQUENCE DESCRIPTION:

GATCTCAGCC ATAAAGTGCC AGTTTGCTTA GTTCTCACTG TCTCCTGGTC TGTGCTGCCC 60  
 TGCTCTGGGG ATGCACGGCG GCAGGGTGGG GGAGGGAGGT TCCTCGCAGG TCTCAGCCCC 120  
 GGACAGGGTC TTGCAAGCAG CCTCCTGGGC AGTCGTAAGG GTTGCGGCGT GATGTCTTCA 180  
 ATAAATTAAG TTTTATTGG AAA 203

SEQ ID NO:1177

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01323

SEQUENCE DESCRIPTION:

GATCAAAATG AAACAAATAT ACCTTATCCT AAAGAGCTCA TAACAAATAA GTTACCTCCA 60  
 CTCTATAAAC TCAGACCTAC TTTTGAAGA TAACTGCTTT TAACCTCTCC TTACAAGATT 120  
 TTTGTTGTTG ATGTATTTAA TTTTAGCCCA TGTCTCAATT CTCATTTTCA AAGAATCAAT 180  
 ATATTAATAT ACCTTTGGTC AAA 203

SEQ ID NO:1178

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01324

SEQUENCE DESCRIPTION:

GATCGCTCTT GTGTTTTGTC ACTATTAATT AACTTCAAGT GCAATTTTGG CAGGCAGGCC 60  
 AAGGGTCTCA ACAGGCTATT TGGAAATGAGT TCTCTTTTAA GGCCTTCAAC GTAGTNGAC 120  
 ATTTTCAAAT CAAAAAGTAC AGCAGGAGCC AGCCTTTATT TTGCTGTGT ACACAATAAA 180  
 ATATTCCGCT TCTATAGGCA AA 202

SEQ ID NO:1179

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01325

SEQUENCE DESCRIPTION:

GATCAGCTGA AGGTTTCATGG GTTTTAAAGTG CTTGTGGCTC ACTGAAGCTT AAGTTAGGAT 60  
 TTCNTTGCAA TGAGTAGAAT TTCCCTTCTT TCCCTTGTC CAGGTTTAAA AACCTCACAG 120  
 CTTGTATAAT GTAACCATTT GGGGTCCGCT TTAACTTGG ACTAGTGTA CTCCTTCATG 180  
 CAATAAACTG AAAAGAGCCA TGCTGTCTAA A 211

SEQ ID NO:1180

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01326

SEQUENCE DESCRIPTION:

GATCCCAGGG TGCAAAGTGG CATTGAGACA GCAGCAACAG CTCAAGAGAT ATCTCCTGCC 60  
 TACTTGCCCC TCCTTCCAGG CCGGCTCTAA GAGAAAGGCC CATCTACTCA GGAAGAGGGC 120  
 CAGGNCCTTG GGTTCCTGGG ATTGGCCCTT GAGAGGGCTA GTCCTGTGGC TGAATAATAA 180  
 GCATGTCCCG CCCNNTAAA 199

SEQ ID NO:1181

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01327

SEQUENCE DESCRIPTION:

GATCTTTTT TGGATATTTA TACTTTTGA TATATAGTAC CTTTAAAGTAG CAGTATGGGA 60  
 CAAGGCTTGT AAATGTTTTG TCTAATGTTT TATTGTCACC TTTTATGCAT TTATCACTTC 120  
 CAAATCTAAC TTTGCACAAG TAACCCATGT AAAAAAAT GTACATTTTT CAAAAGTTGT 180  
 AAATAAAAT AACCTTAAA 199

SEQ ID NO:1182

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01328

SEQUENCE DESCRIPTION:

GATCTGGACA GCTGTCCCTC CACTACAGAA ACCTCACAGA ACACAGCAA GNATAAGTGC 60  
 ANGAAGGCTG CTTCCAGCTC CAAAGCACCT ANGAATGGAG GTAAAGCGAA GGATTCAGCA 120  
 ANGACAGCAG AGGAACTTC CANGCCAAAA GNTGACTAAA GNAGTACAGG TTANGGTATC 180  
 TGGTATCTGC ATGTAGANTC TTCAGCTGGT GGATGGTGAC TTTTGAAGTA CNAAGGCTT 240  
 TGGCAACNGN AN 252

SEQ ID NO:1183

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01329

SEQUENCE DESCRIPTION:

GATCTAGGGA GTTACCTAGC AGACCTTCCG GACTGACGTG ATGCTACAGG GGTCCCATCT 60  
 TTCCTTGTC TTAGGCTATT TTACAGTTCT GTGAATTGTA AAGAACTGAG GGTAAATGCGA 120  
 ATNACTCTTG TTCATAGAGG CAAATGAATT TTGTCCCATG GAGATTTAAT TGATATTACT 180  
 CTGTGGATGT TGACAAA 197

SEQ ID NO:1184

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01330

SEQUENCE DESCRIPTION:

GATCATAGCT ACTACTTCAT TGCAACCTTT ATTAAGTAC CACATCAGAC ATCATGCTAA 60  
 ATACCTGAAT GCATGAAAAA ACTCCAAATA AGAGAATCTC TTCAGGATTA TAAAAGTTGT 120  
 AAAATGCAAC TGTATTGCTG AGCAAA 146

SEQ ID NO:1185

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01331

SEQUENCE DESCRIPTION:

GATCCGGCTG CACACCAGGT GCGGAGGCTG AGCCATCCCT GCTGGACTCC CTACCGCAGA 60  
 CGGAGTCANG NACGCAGCCG CAGCCNCNTT CCTTCACACC CCCTCACAGA CTCCTTGTGT 120  
 CCAACGGGAA TAGGAAGAAT TAGTTACTGA CTTACCTGA GAAAAAATA AATNCTCTAT 180  
 GGTGGTTTCA CAGGAAA 197

SEQ ID NO:1186

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01332

SEQUENCE DESCRIPTION:

GATCTCTTTG TGAAGTCTGT GTTCTCTATA TTAGATTGCT GTTTATATGT AAGAATTTTA 60  
 TTGCTTATGT GGCATACAAT ATTTATACT ATAACTTTA TAGAAGTACA GTATTAAAGT 120  
 CAGTGGTACA CAGACATTCT GTACATATCC TGTGAAACGT GCTGTCATAT GAAATAAATA 180  
 TATCTGTCTT TACAAA 196

SEQ ID NO:1187

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01333

SEQUENCE DESCRIPTION:

5 GATCTTCCCC ATTGTCCACT CAAGTCGTGG CCTGGGGAAC ACAGACGGAG CTGTCCCCAG 60  
 TGTCTCCCGT CCCTCAGCCC CTGGCCTGGC TGAGTTTGGC AGGGCCTGGG CCATCCCTGG 120  
 GACAAAGGTG CGTCCCTTCA GCTCTTCTCC GTGGAGCTCG GGGCTTTCTG TATTTATGTA 180  
 TTTGTACGAA TGTAAG 196

10 SEQ ID NO:1188

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01334

15 SEQUENCE DESCRIPTION:

20 GATCTTCGGC CTCATTCTGA ATACCTNTTC TTTGGACAGT NTTTTTCCTT TGGTGCTCTC 60  
 TTGCCTTTAG CTACCTTCTC TAATATGTAT GCTACCATCA CTAATAAAGT GATGGGAATG 120  
 GGTITGAGAG TCGTAATTA TATTAAGGAG TTGTTGGACT TTAAATACA TTTTNCAAA 180  
 TAAAAAATTA AGCAAA 196

SEQ ID NO:1189

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01335

SEQUENCE DESCRIPTION:

30 GATCATGTGT GCACAATACT TGTGGCCAC AAAATTTAC AATGACTGCT GAGGAATCAT 60  
 TCTTTTGGC TGTAATAAT AACAAAGGC ATCATTAGT AGACCAGGTA ATTACTGCTT 120  
 GTNTCTCAAG GCTGCTGTCT TTATCAGCAC TAACTAAATA AATTTGTTGG TTCAGTTGTA 180  
 CTTGTCCTGC AAA 193

35 SEQ ID NO:1190

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01336

40 SEQUENCE DESCRIPTION:

45 GATCCTGTGT CCTAAATTA TATACACCAG TGGTTCCTCC TCCCTGGTAA AGACTAATGC 60  
 TCAGATGCTG TTTACGGATA TTTATATTCT AGTCTCACTC TCTTGCCCA CCCTTCTTCT 120  
 CTTCCCAATT CCAACTCCA GCTAAATAT GGAAGGGAG AACCCCAAT AAACTGCCA 180  
 TGGNCTTTA AA 192

SEQ ID NO:1191

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01337

## SEQUENCE DESCRIPTION:

GATCAGTGCC TTGATGCCAA CTAAGGAAAT TTGTTTAGCA TTGAATCTCT GAAGGCTCTA 60  
 TGAAGGAAT AGCATGATGT GCTGTTAGAA TCAGATGTTA CTGCTAAAT TTACATGTTG 120  
 TGATGTAAT TGTGTAGAAA ACCATTAAAT CATTCAAAT AATAAACTAT TTTTATTAGA 180  
 GAATGTAAT 189

SEQ ID NO:1192

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01338

## SEQUENCE DESCRIPTION:

GATCAAAATTT TTGTAAATTT TTTTAAGAAG AGATGGCTTA TTAACAGGGA AGAAGCTTGT 60  
 NATATTCCAG TTGTAAAGAT AGCCTTAGTG TTTAGATTTT TTNATGATAG GNNAGATGCG 120  
 GNCATCACTG GGATATTNC AAATCCCAAG GNCATCAGAG TGAAGTGTC A GTTGTCAGAT 180  
 GATTNNAN 189

SEQ ID NO:1193

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01339

## SEQUENCE DESCRIPTION:

GATCCCAGCC AGGCCCTGGA GGTCTGACAG CCCCTCCCTC CCAGAGCTGG TTCCTCCCTG 60  
 GGAGGGCAAC TTCAGGGCTG GCCACCCCCC GTGTTCCCA TCCTCAGTTG AAGTTTGATG 120  
 AATTNANGTC GGGCCTCTAT GCCAACTGGT TCCTTTTGTT CTCAATAAAT GTTGGGTTG 180  
 GTAATAAA 188

SEQ ID NO:1194

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01340

## SEQUENCE DESCRIPTION:

GATCTGAATG ATACTGTCTG CTGTGTCTTT TTTCATGAG AAATCACTGT TGCAAAATGC 60  
 CTATAAATG ACTCTACTAA AATAACAATG TTTCAGTCTG AAAATTTGAA TTGAAAAAA 120  
 TGTATAATAT AAAATTGTAA TACTCTAAA TGATTATAAA AGTAAAAGTT GGTAATTTAG 180  
 GCAGAAA 187

SEQ ID NO:1195

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01341

## SEQUENCE DESCRIPTION:

GATCAGGGGG GAAATGGAAT GAGTGAGGCG GGCCAGGGAG CCGCTCAGCT CCAATCTTTG 60  
 TCACTGTGTG AAATGTGGAC TTGGTATGAC CTGACTGTCC AATTTTCAAG ATGAACCAGA 120  
 AATCCAGACC NTTATATAAA ATCTCCTGGA TTTTAAATG TTGGCAATTA ATCAGAATGT 180  
 TTTTAAA 187

SEQ ID NO:1196

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01342

SEQUENCE DESCRIPTION:

GATCACTTAA TTCCTTTCTT ATCTTCCCCC TCACTTCCCT TTCTCCCACC CTCTTTTCCA 60  
 AGCTGTTTCG TTGGAATATA TTAAGTGAAT GAGTTGCAGG NAATGCAGCA NACTTGTTTC 120  
 NCCTAGATTT GAGTCAAACT CCTGNTCAAA GAATCGGTNG GGCATANAAG AAATNTTCTT 180  
 NTTAAA 186

SEQ ID NO:1197

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01343

SEQUENCE DESCRIPTION:

GATCTTTTAA ATGACAGTAC AGACTGAGAT TTGAAGGAAA CATGCACAAA TCTGTAAAAC 60  
 ATAGACCTTC GCTTTATTTT TGTAAGTATC ACCTGCCACC ATGTTTGTGA ATTTGAGGGT 120  
 CTTGATTTCA CCATTGTCGG TGAAGAAAAT TTTCAATAAA TATGTATTAC CCGTCTGAAG 180  
 CTTAAA 186

SEQ ID NO:1198

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01344

SEQUENCE DESCRIPTION:

GATCTTCAGG TATTTTAAAT TTAGTTACA TCAATTAATG TAAATNAATC CAAATGCTAA 60  
 TTTTGTGGT GCAAGAAGTT TCTTATGTAA ATNCAGGGTA TGGATAAGCT AATTAAGATA 120  
 TCCATCTTTG GTGGCTCTAA GTGTATTATT TGTNTTAAAA TAAAGTGTAC AAATATAGAT 180  
 AACAAA 186

SEQ ID NO:1199

SEQUENCE LENGTH:184

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01345

SEQUENCE DESCRIPTION:

GATCTAAACA CGAGGAAACA TTATTCATTG GAAAAGTGCA TGGTGTGTAT TTNAGGGATT 60



ATNAGCTTCT TTCAAGGGCT AAGGCTGCAG AGATATTTCC TCCAGGAATC GTGTTTCAAT 120  
 TGTAACCAAG AAATTTCAT TTGTNCTTCA TGAAAAAAAA CTCTGGTTT TTTTCATGTG 180  
 GAAA 184

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SEQ ID NO:1200  
 SEQUENCE LENGTH:183  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01346

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SEQUENCE DESCRIPTION:  
 GATCGCCCGC CCCAGCCCGG GGCCGCTCAG GTCTGCTTGG AGGATGCCTC CCCAGGAGG 60  
 GCAGTGAGGG ATGCCGCAAC CTCGACTTCT CAGCCTCCTG GGGTCCCGCC GGCCAACACT 120  
 GTCTGTNTCA AATACTGTGC TGTGAGTTGT TTCAATAAAG GGGCCCAAG GGCTGGGCTG 180  
 AAA 183

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SEQ ID NO:1201  
 SEQUENCE LENGTH:184  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01347

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SEQUENCE DESCRIPTION:  
 GATCTCTGCT CAGCTTCCCT TGCCTTTTAA GGCCTGCCCT AGCCAGGGTT CCCTCCTGCT 60  
 TCCAGTACCC TCTCATGGCA TAGGNTGCAA CCCAGCAGAG GGCAGCTAGA TGGACATTTT 120  
 CCCTGCTCGG AAGGGTTNGC CTGCCTGGCT GGGGNGGTCA GTAACTTTG AATAGTAAGC 180  
 CAAA 184

25

SEQ ID NO:1202  
 SEQUENCE LENGTH:183  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01348

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SEQUENCE DESCRIPTION:  
 GATCCCTTTT GGTTTTACTA CCCAAATCTA AATAGATACT TTGATAATA GATAACTGCT 60  
 CTTTACTAA GACATAGTCT CTACCTATAG AAATGTATTT TGAACACT TATTTTACAC 120  
 AGCAATTTG TATCCATTTA AACTAACCTT TTATCAATAA AGCACTATTG TTTAGATATT 180  
 AAA 183

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SEQ ID NO:1203  
 SEQUENCE LENGTH:183  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01349

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SEQUENCE DESCRIPTION:  
 GATCTCATTC TCCCTTTTAA TCCTGAGTTA CCATCAGTGC TAATGTTTCT CTTTGGGTA 60  
 TAGTTCTCCA GGAGAACTTG TCCTATATTT NTTGTGTGT GTTTTTTCC TTCCAGCTTA 120

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AACAAATTAA AACTAAATAT CTAAACCTTG TATACAGACA TTAATAATTAG TGAGAGAAAC 180  
AAA 183

5 SEQ ID NO:1204  
SEQUENCE LENGTH:183  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01350

10 SEQUENCE DESCRIPTION:  
GATCTGCTTT TNCATTCTT CCTCAACAAA TCCTCTTAAA GACCCCTTGC TATGTAGTCT 60  
CATGGTCTAG CATGCATCTT GTAGAAACAA GGCATNCTGG CAGATTGCAG GGTGAGATG 120  
TGTTTATCT GTTTTATATT TTAAGAGATT CTGCCAGAAA ATAAACCAG ACCTTGTCT 180  
15 AAA 183

20 SEQ ID NO:1205  
SEQUENCE LENGTH:183  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01351

25 SEQUENCE DESCRIPTION:  
GATCTGAATA GAGAAATGCT TACAGATAAT CATTAGCCCA CATACCAGTA ACTTATACTT 60  
AAAGATGGGA TGGAGTTGTA AAGTGCTTTT ATAATACAAT ATAATTGTTA AAGGCAAGGG 120  
TTGACTCTTT GTTTTATTTT GACATGGCAT GTCCTGAAAT AAATATTGAT TCAATATGGC 180  
AAA 183

30 SEQ ID NO:1206  
SEQUENCE LENGTH:182  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01352

35 SEQUENCE DESCRIPTION:  
GATCCTGGG GGCAGGGTG AAGGGTATTT TACGGGAACT CTATAAGCA GGAAGAAGCA 60  
AGTTTATTCT TTAGACCAGT AGCTCTCAAC CATGATGTGG TCGTATATTT ATGGGTCAAC 120  
ATGTGTTGTG GGGATATCCC AAGTAACTTG TTATTAATAA AAGTTAAGTT GCAAAATTTA 180  
40 AA 182

45 SEQ ID NO:1207  
SEQUENCE LENGTH:182  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01353

50 SEQUENCE DESCRIPTION:  
GATCAAAATT GAAGACACAT TCAGAGGTTT GATTGGTTGA GATTAAGTGG TGTGGTGGT 60  
GGTGTATGTA TGTTTNAATT TNATGTCTTT GTATGTAGTT CTACATAATG CAAATTGTGC 120  
TTTCTGATGG ACAAGACCTC ATAAGTGTGA TTAATATCAA TAAAAAGGGG ATGTTGTGGA 180

AA

182

SEQ ID NO:1208

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01354

SEQUENCE DESCRIPTION:

GATCCGTCAA TCTGGGTGG AATNATTGTN CGCATTGGCG AGAAATATGT TGACATGTCT 60  
 GTCAAGACCA AGATTCAGAA GCTGGGCAGG GCTATGCGGG AGATTGTCTA AAAGTGTGG 120  
 TTTTCTGCCA TCAGTGAAAA TTCTTAACT TGGAGCAACA ATAAANAGCT TCCAGAACAG 180  
 AAA 183

SEQ ID NO:1209

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01355

SEQUENCE DESCRIPTION:

GATCATGTTA TATTCTATAT CAGACAACT ATTTNTTTT GACCTTTCTT CCCCTCCATC 60  
 CAGTATTTTC GTTGATTCA TTTTCTCCC TCTCTCCCC TTCCACGAAC TGCAATACCA 120  
 GTAACCTTGG TATATATTTT TTGATACTGT ACACATGGAT GTNTTGTTC TATGTGCAAA 180

SEQ ID NO:1210

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01356

SEQUENCE DESCRIPTION:

GATCAAAGAT TCTCCCCATC TCACAGACAA GGAAACTNAG GCCAGAGGGA GGAGAGAATT 60  
 GCTCATGGCT CCANAAGTGG TGGCAAGTTT CTCTGGACTC TTAGGTTTAT TTTNAATATG 120  
 AAATATAAAA NCAGTTTCAA ATATCTNATT GAGGGAGANG TAAACCTTA TTAAANCAAA 180

SEQ ID NO:1211

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01357

SEQUENCE DESCRIPTION:

GATCTATAAA ATGGAAGGTG ACCAATGTCA CTGCTTCTAA AATACTGTCC TAAACAACCC 60  
 AGAAGATTTT ATTCAGCTC ATGAATAGCT GTTCTAAATC TGTTGTATGT TAGACATACT 120  
 ATGAACTACC TCTTCACTTA TTATGGGGAA GTTCCTTAA TAAAAGTGTG ACGATTAAA 179

SEQ ID NO:1212

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01358

SEQUENCE DESCRIPTION:

GATCCAAGAC CAGGGNGGTT GGGACGGCCT CCTNTCCTAC TTTGGGACGC CCACGTGGCA 60  
GACCGTGACC ATCTTTTGG CGGGAGTNCCT CACCGCCTCA TTCACCATCT GGAAGAAGAT 120  
GGGCTGAGGC CCCAGCTGC NTTGGACTGT TTTTNCNC CATAAATNAN GGCATTTN 179

SEQ ID NO:1213

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01359

SEQUENCE DESCRIPTION:

GATCTGAGAT GTTCCTTAAC ATGTAGCCAT GTAATTAGAA CTCACAAGGG GCATTGAAAT 60  
NTTTCCTTT TTCANATAGT CTGGGGCTAT TTACTTATTT NAAGTAAGCC AAGTCTACCA 120  
TTGAAAAAT GGTGCTTTAT TTCCATATCT GANGCCTGAN GTTATTNNN AGTTTGTN 178

SEQ ID NO:1214

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01360

SEQUENCE DESCRIPTION:

GATCTGGCAT CCNAGGCTG CAGCTTTATT AGCTTATAAC TTACTCATCT CTATCTTTAC 60  
GAGCAGGCTC TGTATTGTTG ATATTTGCAA CTNGNTTTCG TTTCCCATG GTGGAATTGA 120  
AATAATTAGT TTTNAATNAC ATAAGANGCC TGTTTGCTAT TNGNGGAAG ATAGATGN 178

SEQ ID NO:1215

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01361

SEQUENCE DESCRIPTION:

GATCAAAGAG GTTATCTCTG CCAGTCACAA GTGTGGCTGG TGTATTCTG GGTCTGACTG 60  
GAGCCCTCCT GGAAGTTTC TTTAATTCA AAAGCCCTGC AGACATAGTA CCTGGTCAGA 120  
ACTATGCCTC GGTATTATTA TCATTTTGAA ATAAATCAA AATTCAACC TGTA 176

SEQ ID NO:1216

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01362

SEQUENCE DESCRIPTION:

GATCAAAACA ATTACCTAAT TGCAAAAGAG AAAGTAAAT GGAACATAGT CTCANATTCT 60

NCTAATGTGT ATCTCACAAT GTCATGTAAT GTAAAGNAAA CCCTTTTGGA ATTAGAATTC 120  
 TTGTNCTGAA TGCTGAACTA TTTGGTAATA AAGTGCTTAT NTGCAGATAA CAGAAA 176

SEQ ID NO:1217

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01363

SEQUENCE DESCRIPTION:

GATCTGTGCT GGGGAACAAA GCTTTTGAG TACCTTATAT TGTAAGTAAA ATTTTATTTA 60

ACATATCCTT CAGTGAGCTC ATTCACACT GTAGCCTCTT CCTTAAAATT TGTGGTGCTC 120

CTGTAAACAGT AAGANCTAAT TCTGAAATAA AAGACATCTC CTAATGCTGT GCAAA 175

SEQ ID NO:1218

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01364

SEQUENCE DESCRIPTION:

GATCAGGATA ATAATCTGCT TAGTAAGAGA AACAAATTGA ATTTAGAAG GAAATTGCCT 60

TACCATTTGC AAATTAAGGT AATTAAAATA CAGTGAATTT CAAAATGCCT TTTAATGAC 120

AATGTGTGAA CTTAATTTGT TTTAATAAAC CAAAATTGTT GTTATTGTGT TAAA 174

SEQ ID NO:1219

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01365

SEQUENCE DESCRIPTION:

GATCTGAGCA GGCAAAGCTC AAAAGAGAGT TTGGAGGTGA AAAATAATTT ATTTTGCAG 60

TAGTGTGCTT TGAATGTGT AAATCTTATT TCTAATGTAT ACAACCACAT TTCACATAAA 120

AATATGCAAT TTATATGCCA GATAAAAATA AAACAAGTGA ATTTGCAAGT GAAA 174

SEQ ID NO:1220

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01366

SEQUENCE DESCRIPTION:

GATCAACATG ATGGTGACTG GGAAAAAATT ACTTCAAGTA ACATGCTTAG CTTTCCCTCC 60

TTAATGTGAA AAATCAAGGG CTTACTGACA TAGGAACAAC AGAAATGCTC CTGGAAGTTC 120

AAGTTGCTGA ATTATAAGTT TATTTTNNAT CAATAAATAT NNNNATACTN AAA 173

SEQ ID NO:1221

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01367

SEQUENCE DESCRIPTION:

GATCCATATT TAGTTTATT AAGCTTTTCC CTGTTTTTAG TTTTGTTTTG GGTTTTTTGG 60  
 CTCATGAATT TNATTCTGT TTGTCGATAA GAAATGTAAG AGTGAATGT TAATAAATTT 120  
 CAGTTTAGTT CTGTAATGTC AAGAATTTAA GATTTAAAAA NCGGATTGGT TAAAAANTGC 180  
 TTCATATTG AAAAAAGCTGG GAATTGCTGT CTAAAA 216

SEQ ID NO:1222

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01368

SEQUENCE DESCRIPTION:

GATCGNCTCT GAACCATCCC NTTTCTGCTG CCCGGAGCTG GGGAAAGCTCG CTGTGGAGCG 60  
 TCTCGCACGT GGCAGGCAGG CAGAGAACTT GCTGCACCTT CTAGGAAATT GCAATCGATT 120  
 TGTAATGCAC TTTGCTAAT TGGGAGTTCA AAATTAAGT TTAATAAAGC AAA 173

SEQ ID NO:1223

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01369

SEQUENCE DESCRIPTION:

GATCTTAAGA GCAGACTTAA AGTAGCTTTG TACGCCTTAA TGTTCATTTT GATTTATTTT 60  
 AAATCTTTAC ATTCAGAAAT NAGATACTGT ATTATCAGAC CAGGAGGCAT TGCTGTGAAA 120  
 GATAATNTCC TATTCTAAAA TATCAAATTT AAAATAAAGA TAATGAAAGA AAACATAAA 179

SEQ ID NO:1224

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01370

SEQUENCE DESCRIPTION:

GATCCAAAAA TGGTAGCCAC TCACCCTTCA CAAACTGAAG TCCATGGACC ACGGAAGTCG 60  
 AGAATTAATG TACACCTGTA TCATGTGTAG GAAACCAGAA ATGTGTTCTT TATTNTTGT 120  
 TCCCAAACAG GATTAAGTGT GAAGACTAAT TTATAAATGT GAACCTAAGA AA 172

SEQ ID NO:1225

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01371

SEQUENCE DESCRIPTION:

GATCAGCATG AGGACAGAAG GCAGGAGACT TTGGTCAGTT ACCTGGGAAT TCTGGGCTGC 60  
 CAGGAAACGA TTTGGGCCTC TGTCAGTTTC TTTTCCATGT ATGAGGAGGG GGAAATTTGT 120  
 ATATTAGAAA CTTATTCATC CCACTCAGGA CAATAAAAAAC GAATGTACAA AAAGCCAAA 179

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SEQ ID NO:1226  
 SEQUENCE LENGTH:175  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01372

SEQUENCE DESCRIPTION:

GATCACAGTG GCCACGNCCA GGCACAGTC ATGGTGGCCA CGTCCACAGC CACTAATCAG 60  
 MAGNCCAGGC CACCCTGCCT CTACCCAACC AGGGCCCCGN GGCCTGTTAT GTCAAACNT 120  
 CTTGGCTGTG GGNCTAGGGA CTGGGGCCAA ATAAAGTCTC TTCCTCCAAG TNAAG 175

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SEQ ID NO:1227  
 SEQUENCE LENGTH:318  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01373

SEQUENCE DESCRIPTION:

GATCTTTAAT CTCATGAAGT ACGACAGCTA CAGCCGCTTC TTAAAGTCTG ACTTGTTTTT 60  
 AAAACACAAG CGAACCGAGG AAGAGGAAGA AGATTGCCT GATGCTCAA CTGCAGCTAA 120  
 AAGAGCTTCC AGAATTATA ACACATGAGC CCCCCAAAAG CCGGGACTGG CAGCTTTAAG 180  
 AAGCAAAGGA ATTTCTCTC AGGACCGTGC CGGGTTTATC ATTGCTTTGT TATTTGTAAG 240  
 GACTGAAATG TACAAAACCC TTCAATGGGA TGTGTGTTTT ATTAAGTCTC TCACCAAGTAA 300  
 ATTTTGCATG ATGGGCTN 318

30

SEQ ID NO:1228  
 SEQUENCE LENGTH:171  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01374

SEQUENCE DESCRIPTION:

GATCTGGAAG AGGCTTGTA CCTGAACTTC TGTGTGGTGG CAGTACTGTG GCCCACCAGT 60  
 GTAATCTCCC TGGATTAAGG CATTCTNAAA ANCTTAGGCT TGGCTCTTT CACAAATNAG 120  
 GCCACGGCCT AAATAGGAAT NCCCTGGATT GTGGGNANGT GGGCGNAAGT N 171

40

SEQ ID NO:1229  
 SEQUENCE LENGTH:170  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01375

SEQUENCE DESCRIPTION:

GATCTGATGG TTTTAAAAAG AGGAGTTTCC CTGCTCAAGC TCTCTCTCTT TGCCTGCTGC 60  
 CATCCATGTA AGATGTGACT TGCTCTCTCT TGCCATCTGC CATGATGTGA GGCTTCCCCA 120

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GCCACGTGGA ACTGTAAGTC CAATTAAACC TCTTTTCTTT GTAAATTAAA 170

SEQ ID NO:1230

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01377

SEQUENCE DESCRIPTION:

GATCCATGGT GTTAGAAGCC AGGGGAACAG TTAACAGGGG AGGGATACTG GGGAGGGGCA 60  
TCCTGGAGTG CTGGTCTACC TCATCTGGGT GTTGATTCA TGAGTATTGT CAGTTTGTTC 120  
CCGACTCCC TGTGGGAGAT GTGAAATAA AAACCACCTA ANCANGNAAA 170

SEQ ID NO:1231

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01378

SEQUENCE DESCRIPTION:

GATCCATCAC AAAGCGAAGT CATGGGAGAG CCACACTTGA TGGTGAATA TAAACTTGGT 60  
TTACTGTAAT AGTGTGCTGT TCATGGAAAC CGAGGGCTGC ATCTTGTTA TAGTCATCTT 120  
TGTACTGTAA TTTGATGTAC ACAACATTAA AAGTACTGAC ACCTGAGAAA 170

SEQ ID NO:1232

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01379

SEQUENCE DESCRIPTION:

GATCTGGGAT GGAATATGGT TTTCTTGATT CCCTTTCAGC CTTCATTCT CTCTCTCAGG 60  
ACTACTACTT TTTAATTACT TTTCACTTAA TTTCCCAATA CTGATGAAAT AAAGAAAAAT 120  
GAGGGTTATT TATATACATT TCAATAAAAT CCAATTGAT TTTTCAAA 168

SEQ ID NO:1233

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01380

SEQUENCE DESCRIPTION:

GATCTAGAGA ACATAACAAA TGAAACTCTA GAAATTTGAA AGAAAAAAAA ACACTTAGCT 60  
GTAAGTGCTT TGACCTATTT TTTTAAAAA AAAAAAACC TGTNTTAATT CTGTGACTGN 120  
ATTGNACCCT TCACCAGCAC TANGNGAAGT NGGANTGGAN GAAATTN 167

SEQ ID NO:1234

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS01381

SEQUENCE DESCRIPTION:

5 GATCAAGCCA TCGGAGCTGC TAGAGTTCTG TCTGGACTTT CCAGAGACCA GTATTCCCTT 60  
 TTGCTGCCTC TAAAAGGCCT GTCCCTGCAG ACATGAGAGA CAGCAGGTCT CATGGGGGTG 120  
 ACAAGCTTTT TTTTTTTT TAAANGATT TCNAAANNNA ANTNCN 167

SEQ ID NO:1235

10

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01382

15

SEQUENCE DESCRIPTION:

GATCTTTTGT CTTCCAGTCT TCTCTTAGTG TCCTGCTCCT AGGTTTCCT CTCTTCTGGT 60  
 TCTTCTCCA GGTATTCTCT TCCCAGGCCT CTCTGGCCAC TGCTTTGTAT CAGGGTTTTT 120  
 CACGCTTTTG TAGAACTGAG GTTTCAATAA ACAGTTTCAG TTGCAAA 167

20

SEQ ID NO:1236

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25

CLONE:HUMGS01383

SEQUENCE DESCRIPTION:

30 GATCCTCCAG CCCACCACCA CATAGTAATC ACTGACACTG TGGGGTGTCT CAGCTGGGGT 60  
 TCTGCTGTGT GTGTGTGTAT TTNACAAAAT ATGTATGGTT TCTGTTGAGC TCTTTTCAGT 120  
 TAACAGATGA ACTGNNNTA TCATTAAATA TTTTGAAAA CATGAAA 167

SEQ ID NO:1237

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS01384

SEQUENCE DESCRIPTION:

40 GATCCATCAG TAATGTAGCT AGCTGTAGAG CTTGCAACTT AATAGCAGCA GCTGCCCAAT 60  
 GCCATGTNAA GTAACAACT GGTTTTGGT TTTTTTTTC CCCTTCAGTT TAAATGTNAT 120  
 GTGNAATGTA TTAAACCCT TATTAAATA AANCTTGTT TCAGAAATAA A 171

SEQ ID NO:1238

SEQUENCE LENGTH:166

45

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01385

SEQUENCE DESCRIPTION:

50 GATCTGGGGT TGGGTCATGA CACCAGCTAC CAATTTNAGA ATATTATCC TNGGTTTCTT 60  
 TATGAAAAAT GGGTGCTAGT GGTAATTCCT TNGTGGCTTA GTAACTACT CNTGGATGA 120

55

TTTCCAAACA TTCAAAGCCA ATAGCCTNGT NATNAACAAG ANATTN

166

SEQ ID NO:1239

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01386

SEQUENCE DESCRIPTION:

GATCAAAACC CAGCAGAGTG CAAGCAGCAG TGAAGCAGGA TGGTCTACCT TCTGCTTCCC 60

TGGAAAGGAT GAATTACAT CATTGACAA GCCTATTTTC AAGTTATTTG TTGTTTGGTT 120

GCTTGTTTTT GTTTTGCAG CTAAATAAA AATTTCAAAT ACAA 165

SEQ ID NO:1240

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01387

SEQUENCE DESCRIPTION:

GATCTGTCTG TGTTGTTATA TATTCTTTTA TGCATACTTA AAGTTAAAGG GTTTTATCCA 60

CTGTCAATTC AATTGGATAA CATTGTGCA AGTTTTTTTT TCCTGATTAT TTGATGTAGC 120

TGGATTCAAG AATGGATTGC CTNATCAATA AAGAATATTT AGAAA 165

SEQ ID NO:1241

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01388

SEQUENCE DESCRIPTION:

GATCCTATTT TGGGCTGGG GTGGGTATAC CTGNGGCTGG TCTTAGGAGG GTGCTAGGCT 60

GCAGACTGCC TTGTACTCCC TGGACACCCT CAAATGGGGT TTTCTGTGTT ATTCATAAA 120

ATTCCTTGAA GTCCAATAAA GCATGTAGGA GATTTTAACC ACTAAA 166

SEQ ID NO:1242

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01389

SEQUENCE DESCRIPTION:

GATCAAAGGN CAAAAGACCA AAAATCAGCG GGCTGAGGAT GGAGCACAGC CATGAACCTG 60

CTCAGCAGAA GACGCACCCA TGCTTCTCAG GGTCAAGGCT TTATGTTAAA GCTTCCTGTC 120

GGGGCTGCTA GGTCAGCATT AAAGTAAGGC AACCAACAGT NAAA 164

SEQ ID NO:1243

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01390

SEQUENCE DESCRIPTION:

5 GATCTGCTCA GTAATATAAT TTGCCATTTT TATTAGAAAT TTAATTTCTT CATGTGATGT 60  
 CATGAAACTG TACATACTGC AGTGTGAATT TTTTGTGTTT GTTTTAAAT CTTTGTAGTGT 120  
 TTACTTCCTG CAGTGAATTT GAATAAATGA GAAAAAATGC AAA 163

SEQ ID NO:1244

10 SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01391

15 SEQUENCE DESCRIPTION:

GATCTGGATT TGCTTTACCT TGTAATATT ATCTAGGGGA AAAAGTGCAA ATTGCTCCAT 60  
 GTTCTTCTCT CCCTTATGTA ACATCTCCTG AGGGTGTTA GTTGCATGGC GTTTCAGAAA 120  
 GGTATTAAGG GCTTAGGCCA AATCTTACTT TGAGTATGTT AAA 163

20 SEQ ID NO:1245

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS01392

SEQUENCE DESCRIPTION:

30 GATCGTCAAA AAGAGAACCA AGAAATTCAT CCGGCACCAG TCAGACCGAT ATGTCAAAAT 60  
 CAAGCGTAAC TGGTGGAAAC CCAGAGGCAT TGACAACAGG GTTCATAGAA GGTTCAGGG 120  
 CCAGGTCTTG ATATGATGCC CAGCATTGGT TATAGGNGCA AA 162

SEQ ID NO:1246

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS01393

SEQUENCE DESCRIPTION:

40 GATCTGGAAG TGAACACAGT TTATGTACAG GAAAAGGAT TTTATTATCC TTAGGAATGT 60  
 CATCCAAGAC GTAGAGCTTG AATGTGACGT TATTAAAAA CAACAACAAA GAAGGCAGAG 120  
 CCAGGATATA ACTAGAAAAA GGATGCTTTT TTTTTTTTTT TNNCNCCTCC TNIAANCNCT 180  
 GNTGCTGCCT NANTTTN 197

SEQ ID NO:1247

45 SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01394

SEQUENCE DESCRIPTION:

50 GATCTCAATG CCAATCCTCC ATTCTTCCTC TCCAGATATT TTTGGGAGTG ACAAACATTC 60

55

TCTCATCTA CTTAGCCTAC CTAGATTTCT CATGACGAGT TAATGCATGT CCGTGGTTGG 120  
GTGCACCTGT AGTTCTGTTT ATTGGTCAGT GGAAATGAAA 160

5

SEQ ID NO:1248

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS01395

SEQUENCE DESCRIPTION:

GATCTGAAAA TCGACCTCAA CTCAGGGTG GTCAGCTCAA TGCTACACAG AGCACGGACT 60

TTTGGATTCT TTGCAGTACT TTGAATTTAT TTTTCTACCT ATATATGTTT TATATGCTGC 120

TGGTGCTCCA TTAAAGTTT ACTCTGTGTT GCACTATAAA 160

15

SEQ ID NO:1249

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01396

SEQUENCE DESCRIPTION:

GATCTGCATG ACCTATAATC TTTGAACCAC TTTCTGACCT CATGTTTTTA TCCAGCACTC 60

TTATTGTAAT ATGTACTAGT CTGTGAACAA TGTCAAATAA AAGAGAACGA ACAGGTAGTT 120

TGGTGGAGCT GAGCTAGTGT ACAATACACT AGTTGTAAA 159

25

SEQ ID NO:1250

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01397

SEQUENCE DESCRIPTION:

GATCTTGGA TTTCTGTNTG GATTTCACA GTTTTAAAA TTAATCATGT CAGCCCAATG 60

CAGCTGTGTC ATTGCCACCT AGTGGTAAAA CTAACATTAC TGTTAAGCTG TGTGATTTTA 120

AACTTGAATC CCCAGTAAAN GGTTCACGT TCTGTGAAA 159

35

SEQ ID NO:1251

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01398

SEQUENCE DESCRIPTION:

GATCCCTCTG AGAGTTGATG AGGATGTGTA ACAAGTATTT NCTTCTATNG TGCCTGCCAG 60

GGCTGAAGCT GCCTGGTATC CAGGAGGGGA ATGCTGGTAT CCCCATATGN CTGTNTTGT 120

TTGAGATTTT TAATAATAAA TAATAAATTT TTGAAGAAA 159

45

SEQ ID NO:1252

SEQUENCE LENGTH:158

50

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01400

SEQUENCE DESCRIPTION:

GATCCTATTC TTGTA AAAAT ATTTGTATGT ATGCACAGAA ATCTGCAAAG ATGTACACTT 60  
AGTGAAGTGG TTACCAACGA ATGGTGGGAC TAACTAAAAT GGTCTTTTTA CTTATATGTG 120  
CATTCTTTT TATAATAAAA ATGGGTTATA TGCCTAAA 158

SEQ ID NO:1253

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01401

SEQUENCE DESCRIPTION:

GATCTGCCCT GTGTATCCA GTTATGAGAT AAAAAATGAA TATAAGAGTG CTTGTCATTA 60  
TAAAAGTTTC CTTTTTATT CTCTCAAGCC ACCAGCTGCC AGCCACCAGC AGCCAGCTGC 120  
CAGCCTAGCT TTNCCCNTT TTTTTTTTT NNNC NNTN 158

SEQ ID NO:1254

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01402

SEQUENCE DESCRIPTION:

GATCTCAATC TTCGGGGTGT GATGAATAGC GAATCATCTC AAATCCTTGA GCACTCAGTC 60  
TAGTGAAGAT GTTGTCATTA TGTACAATAC ATAAGTAGTT TAATTAAC TA GTGATGTTA 120  
ACTATTATTA ATAAATTTTA ACATTTTCCA AAATAAA 157

SEQ ID NO:1255

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01403

SEQUENCE DESCRIPTION:

GATCCGGATC NGGGGAGCTC TGTACAGAGG GCTGGTGATT GTAAAAATTT CTTTTGTAAA 60  
GTAGAAGTTG GGGGTGGGGT GGGTGCTGGC TGCAAAAATT TCTGGCTTCT CTTACCCCTA 120  
TTGCCCCCGG CAATAAATTG TTTCTATATG CCAGAAA 157

SEQ ID NO:1256

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01404

SEQUENCE DESCRIPTION:

GATCTTATTT GGAATTGACA TTCTCTATTG TAATTTTNTT CCTGTTTATT TTAAATTTN 60

CTTTTGTGTT CACTGGAAAG GAAAGATGAT GCTCAGTTT AAACGTTAA AGTGTAACAAG 120  
 TTGCTTTGTT ACAATAAAAC TAAATGTGTA CACAAAGAAA 160

5 SEQ ID NO:1257  
 SEQUENCE LENGTH:156  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01405  
 10 SEQUENCE DESCRIPTION:  
 GATCTTTGTN CTTGACCTCT AGACCCCAAG ATGTGAACAG TGCACGTTTT AATGTCATCT 60  
 TTNCTCATGT GTTATAAGCC CCAAGTTGCT GTATATTTC ACAAGTATGT CTACACACTG 120  
 GTCATGATTT TNATAATAAA TAACGATAAA TCGAAA 156

15 SEQ ID NO:1258  
 SEQUENCE LENGTH:155  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 20 CLONE:HUMGS01406  
 SEQUENCE DESCRIPTION:  
 GATCTTGCTC TGATTATAAT GCCAGTGAAT GTTGCTGAAC TCTTTGTATA TGCAAATTGC 60  
 AAGATTTAAA CCATTCTGAT GCAAGGATAA ACCTTTACTT TGACTACCAG CCTGTGTTTT 120  
 25 TGCTTTTAAA TCTCTTAATT TCATTCCTCT GCAAA 155

SEQ ID NO:1259  
 SEQUENCE LENGTH:155  
 SEQUENCE TYPE:nucleic acid  
 30 TOPOLOGY:linear  
 CLONE:HUMGS01407  
 SEQUENCE DESCRIPTION:  
 GATCTGCACT CCCACTCCCC CCACACTTCC CAAAGTGCTG GGATTACAGG CATAAGCCAC 60  
 35 AAGCCACCTC ACCCAGCCAA CATGTTACAT CTTAATTCTT GGATTTTCTT CACTGCAGGG 120  
 CTTTGGGTGG AGAAATAAAA CTCTTCAAAT GCAAA 155

SEQ ID NO:1260  
 SEQUENCE LENGTH:155  
 40 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01408  
 SEQUENCE DESCRIPTION:  
 GATCTGGGAG TGCTGGACGT CATCTTCAC CNCACCCAGC CGTGGGTCTT CTCCTCGGGG 60  
 45 GCAGACGGGA CTGTCCGCCT CTTACCTAG CTGTTCTGCC TGCCTGGGGC TGGGGTGGTC 120  
 GTGCTGAAGT CAACAGAGCC TTTACCCTGT GCAAA 155

50 SEQ ID NO:1261  
 SEQUENCE LENGTH:158

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01409

SEQUENCE DESCRIPTION:

GATCTTGGAG GCCAGCCAGC TGAAGGAGAC ACTGCAGGCG GTGCCCAAGC CAGGGGCCTT 60  
TGACCTGGAG CAGGTGAAGC GTTCCACCTA CTTNTTCAGC TGACACCCCG TGAGCCTTGT 120  
CAGTGTGTAA ATAAAGCTCT TTTGCCACCC CCAGGAAA 158

SEQ ID NO:1262

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01410

SEQUENCE DESCRIPTION:

GATCCATCAT NGATGTAAAA GTTCACAATC ATGGTTCAAA TGTAACAGTG CAGAATTGAA 60  
TATGGAGGCA TGCATAACCT TCCTCTTAGA AAATGGCAGG TGTGTAAATT TCAAAATTTT 120  
GTGCAATTAG ATTAAATCAT AATGCAACAA A 151

SEQ ID NO:1263

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01411

SEQUENCE DESCRIPTION:

GATCTGATGG GTTATCAGG GGTTTCCACT TTTGTTTCTT CATTTTCTCT TGCCACCAGC 60  
ATGTAAGAAG TGCCTTTGGT CTCCTACCAT GATTCTGAGG CCTCCCTAGC CATGTGGAAC 120  
TGTAAGGCCA ATTAAACCTC TTTTCTTCC CAAA 154

SEQ ID NO:1264

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01412

SEQUENCE DESCRIPTION:

GATCAGCACC TTGTATAGGA ATTCCCATGA ATTATGACTT CTCATTCTGT TTTATCAGAG 60  
TGCAATATG TCCTACTTCA GGAAGTAA AACAGTCATT TACGAAAGAA AGTCAATCTG 120  
TATCCTAAGC ATTTAATAA AAAGTAAAA CAAA 154

SEQ ID NO:1265

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01413

SEQUENCE DESCRIPTION:

GATCTGGCC TGAGAATTGA GGGGAGGTGG CCAGCCCGCA GAGGTGGGGT GCTGGGGCTG 60

CATGATTTTN GCCCTGCGTC CCTTCTCTTT GGGGCTCCTT TCCCCTCTCA TACATAAAAT 120  
CGCTTTCAAA TTAAATCGC TGTCTTCTGG AAA 153

5 SEQ ID NO:1266  
SEQUENCE LENGTH:163  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01414

10 SEQUENCE DESCRIPTION:  
GATCCGAGTG AAGCCCCAGG TCTCANAGAG CAAGCTGTAG CCAGATGGTA CCAGCTTCGC 60  
CTGGGGCTTC AAGAACCTCC CATCTATCCC CATTCCTGAN ACAGGGAGTT ACAGTCCCTT 120  
TTTGCCCTC ACATNCAATA AANGTGACTG ATANCACTGG AAA 163

15 SEQ ID NO:1267  
SEQUENCE LENGTH:153  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01415

20 SEQUENCE DESCRIPTION:  
GATCTGGCAA CACGTTTTNN TTGGAATATT TGTGTTTTCT TGAGGAGGTA TAATTACTGT 60  
ATCCTAGGTG TGAATTTTGG AGTGCAGATG CACATTTTAA AGAAATNATG ATTAANCTGA 120  
25 TAATGTTTTT NGGCTGAAAA TATAAANNA AAN 153

SEQ ID NO:1268  
SEQUENCE LENGTH:152  
SEQUENCE TYPE:nucleic acid  
30 TOPOLOGY:linear  
CLONE:HUMGS01416

SEQUENCE DESCRIPTION:  
GATCATAAAT CAAGGAATGC TGACAGCCAC TAAAGCTGGA GAAGGCCAAG GACAGATATT 60  
35 CAATCCTCCC GTAGAAGTAC AGCCCTGCTA ATGCATTGAT TTTGGACTTC TGGCCTCAGA 120  
ACTGTAAGAG AATAAATTC TATTGTTTTA AA 152

SEQ ID NO:1269  
SEQUENCE LENGTH:152  
40 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01417

SEQUENCE DESCRIPTION:  
45 GATCAGACCA ACAGTGCTGT TTCCCGGGAG GAACACTTTT TNATTNTTAC CCTTTGCAGC 60  
TCCCACCTTT AATCTGTTTT ATACCTTGCT TATTAAATNN GCGCTTAAAT NATTGAAATA 120  
ATGCTGNCTT AGTAGCAACT AAAATGTGNC TN 152

50 SEQ ID NO:1270  
SEQUENCE LENGTH:156

55



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01418

SEQUENCE DESCRIPTION:

GATCCCCCT ACCCACCCA GTCCCAAATC CAGTCCTCTG GCCCTTGCCT AGCCCTGAAT 60  
 TGCTTCTCTA AGCTGGTGT CCCATGCACA GGGCCATTCA GGAAGGGCTG GGGGAGTGTG 120  
 TGTGGCAATA AAGCTTGAAG GCACCGTGGG AGCAAA 156

SEQ ID NO:1271

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01419

SEQUENCE DESCRIPTION:

GATCCTCTTC TCTCCAAATG TTAGCCATCC TGAAGTAGCC GAACAGTAGA AACTTTGGTG 60  
 GGGATTAAAC GGGAGCTTGA AAATTTGTNT TTGGTAACCT GATACTGGAC AGCTGAACTG 120  
 AATGGCTGCA AAATAAATAC CTCACATGAA A 151

SEQ ID NO:1272

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01420

SEQUENCE DESCRIPTION:

GATCCTGGAG GACCCTGGGC CCCAGGCCAG CTCCCATCGC TGGGGGACGG TGAACGGCCA 60  
 TGTGTAAATG TTACGATGTT TTTAAAAGAC AAA 93

SEQ ID NO:1273

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01421

SEQUENCE DESCRIPTION:

GATCCCCTTT GTCAGTGGGG AAACCAAGGC AGAGCTGAGG GGACAGGGAG GAGCAGAAGC 60  
 CATCAAGATG GTCAAAGGGC CTGCAGAGGG AGATGTGGCC CTTCTCCCC CTCATTGAGG 120  
 ACTTAATAAA TTGGATTNAT GACACCAAA 149

SEQ ID NO:1274

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01422

SEQUENCE DESCRIPTION:

GATCTCAACG TGCTGATATG GAAAGTGCTT CAGAATGTAT TAAGGACATA AATTAAAGTGT 60  
 ACAATAATGT GTGTGTGTGT ATATATGTAT ATGCTTACGT GTGTATGGAA AGTATCTCAG 120

CAGATACAAT AAAAACTTAA TTGTGATTAA A

151

SEQ ID NO:1275

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01423

SEQUENCE DESCRIPTION:

GATCCTCCCT CTATTTTGCA AACAGTCTGT AAGTAACTNA TAAAACTTTA AAATATGCAA 60

ATTTTAAAT TATATAGTTT GATTTACTCA TCAAATTATC ATGTATGCTG TTATTTAAGT 120

ATGAATAAAG GCTTTTTTAA ATNGGGAAA 149

SEQ ID NO:1276

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01424

SEQUENCE DESCRIPTION:

GATCCTACTC CTTTGGAGTA AAAC TAGTGC TTACCACTTT CCAATTGTAT TTAGCTTCTG 60

GTTGGAATTT GAAAAAAAAA GAAAAAAGA AAAAGAAAAC CTAAATAAAA TAGGTGAAAAG 120

TTCCCTGACT ATTCAGGTGA ATACACAAAG TTTGAAGTGT TAACTTTTTT TTTCCATTTC 180

ACTGATGTTA CTGGTCACCT TAGAGAATTA TTTCATAGTC TGTGGCTAAA TAGTAAATTC 240

AGANGAAAAA TAAA 254

SEQ ID NO:1277

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01426

SEQUENCE DESCRIPTION:

GATCCTACTG TTGAGTTAGG AAAATATGGT TAGACAGACT CACATTACTT TTTTCAGAG 60

GTAAACTCTA GATTACTGTG TCAACCCAAT ACTATTGGC CATAGATGTA AAAACTACCA 120

AATAAAAGTG GATTTTGTGG TCTACAAA 148

SEQ ID NO:1278

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01427

SEQUENCE DESCRIPTION:

GATCCACAGT GGAGTCTCAG TAATTATATC TCCTTGATT CTTCATTTC TCTTCTGCTA 60

TAAAAGTAGA GATAATGTGT AGTCACTNCT CATTTAGTGA ACCAATTGTN ATANTTCTGG 120

AAATCTNTTN TCTTTAAGTG TAAATANN 148

SEQ ID NO:1279

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01428

SEQUENCE DESCRIPTION:

GATCCCAATC AGATTCCCGC TAATGGAAGA AGTTTAGAAT CTTTCAGGTG GAATAAAGTC 60

ACATGAAAAC AAAACACAAC TATATATATT TCCAGTTTTT TTGCCTTATT GATTTTTTNC 120

CAAA 124

SEQ ID NO:1280

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01429

SEQUENCE DESCRIPTION:

GATCTTTGGG GAGATACATC TTATAGAGTT AGAAATAGAA TCTGAATTTC TAAAGGGAGA 60

TTCTGGCTTG GGAAGTACAT GTAGGAGTTA ATCCCTGTGT AGACTGTTGT AAAGAAACTG 120

TTGAAAATAA AGAGAAGCAA TGTGAAA 147

SEQ ID NO:1281

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01430

SEQUENCE DESCRIPTION:

GATCCTGACA CTAAGGAATG CTGAAGCTTT GGAATTCCGC AGTCTCCAC CTTCAGTCAT 60

CAGCTACAGT TGGAATGAAT TTAAAAACGC TCGGGACCTG TTAATNTNTC CTGTAGNCTG 120

TATTATNTNA AAAATCTGGG CAACAAA 147

SEQ ID NO:1282

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01431

SEQUENCE DESCRIPTION:

GATCTCGCTC CCCCTTCGG TTCTTTCGAC CGGTCCCCC TCCCTTTTTT GTTCTGTTTT 60

GTTTTGTTTT GCTACGAGTC CACATTCTG TTTGTAATCC TTGGTTCGCC CGGTTTTCTG 120

TTTTCAGTAA AGTCTCGTTA CGCCAAA 147

SEQ ID NO:1283

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01432

SEQUENCE DESCRIPTION:

GATCTCAGTT CCTGGCTTTC CCCCCAGCCT TCTCACCCTT TGTGTCTGTG TAGTGATTG 60  
GTGAGAAATC GTTGCTGACC CTTCCCCAGA CCATTATGA GTCNAAGTTT ATTATTCAAT 120  
AAAAGTGCTN TATGCGCTTT CTCAAA 146

5 SEQ ID NO:1284  
SEQUENCE LENGTH:146  
SEQUENCE TYPE:nucleic acid  
10 TOPOLOGY:linear

CLONE:HUMGS01433

SEQUENCE DESCRIPTION:

GATCCAAAGA TGAGGGGATT NTTTCAGAAA GACAATCTCG GCATGCATTA TTTCTTTNNT 60  
TTGAAGATTC ACTCATGTTG CATGCATCTN TAGCTTGTC CTTTTAATT CCTAGTAGAT 120  
15 TCTGTCATAT GCCTATCTNC AATTNN 146

SEQ ID NO:1285  
SEQUENCE LENGTH:167  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear

CLONE:HUMGS01434

SEQUENCE DESCRIPTION:

GATCCCCATG CTAAGAAAAT GCCCAAAAAA ATAGGCAAAA CACGAGAAGA GCTAGGGTAA 60  
25 GAGAAGGACG TAAACAGAAC CTGACACCAG CTCCTTTTCC TTCTATACAT TATTTAATAC 120  
CTATTAAATA AAATNATTTT TGAATAAAG CTTGTGGGAA CATTAAA 167

SEQ ID NO:1286  
SEQUENCE LENGTH:179  
SEQUENCE TYPE:nucleic acid  
30 TOPOLOGY:linear

CLONE:HUMGS01435

SEQUENCE DESCRIPTION:

GATCAAAAAG GCTTATAAAA CAGAGTAATC TTGTTGGTTC ACNCTTGNGA CCGTGAAGAT 60  
35 ACTTTGTATT GTCCTATTAG TGTTATATGN ACATNCAAAT GCATCTTNCA TGTGTTGTTC 120  
TTGGCAACAA ATTTTGAAAA GTAATATTTA TTAAATNTTT TTGTATGCAA ACATGCAAA 179

SEQ ID NO:1287  
SEQUENCE LENGTH:145  
SEQUENCE TYPE:nucleic acid  
40 TOPOLOGY:linear

CLONE:HUMGS01436

SEQUENCE DESCRIPTION:

GATCCGATGG GAGTGTAAT GTGAGACACA ATGTCTTGAT TATACCTGTT TGTGGTTTAG 60  
45 CTTTGTATTT AAATAAGGAA ATAACTTGA AAATNATTTG TCATCATAAA AATGAAACAA 120  
ATNAAAATAT TTATTGCCAG GCAAA 145

50 SEQ ID NO:1288

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01437

SEQUENCE DESCRIPTION:

GATCAGGGCA TGCAACCAAA AGCAGCTTAA ATGAAATATT TAAAAATAAA ATATCAGGAA 60  
GCTATTTTGA GATTCTCTCT GGCTTATGTT TCTACTTTAG GACCCTCATT GTNCTCTTAT 120  
TAAAAAAAAT TATTCCTGT GCAAA 145

SEQ ID NO:1289

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01438

SEQUENCE DESCRIPTION:

GATCAGATTT TTTTGTACC TACGTAAGAG TACTTGAAGT TTTATTTAAA ATAAATGTT 60  
GTGGAAGAG TAGCATTCTT TTTTAGGAG TGTATTTT CACTATGTGT GGCACGGATA 120  
CAATAAAGA CTTTACAAA CTAAG 145

SEQ ID NO:1290

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01439

SEQUENCE DESCRIPTION:

GATCCAGGG CTCCTGCCA TTTTAGTGTC TTGGTGTAGT GTAACCATTT AGTGGTTGGT 60  
GCCATTTTT TTTTGTNCA AATGATTAA ATNATTGGAA TNCACAATTT TTAAATATN 120  
CAAATAAAN GTTAAAAACC TTAAG 145

SEQ ID NO:1291

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01440

SEQUENCE DESCRIPTION:

GATCAGGAAT TCTAAATAAA TTTCCAGTT AAAGATTATT GTGACTTCAC TGTATATAAA 60  
CATATTTTGA TACTTTATTG AAAGGGGACA CCTGTACATT CTTCCATCAT CACTGTAAAG 120  
ACAAATAAAT GATTATATTN ACAA 145

SEQ ID NO:1292

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01441

SEQUENCE DESCRIPTION:

GATCTGCCAG CACCCTGTGG GGGCCAGACT ACAGGCTGAT GCGGGAGGCT TCGAGTGACC 60  
 CGGGTGCCGA GGAGCGGGAA GAGTTGCTGG GGTAAGGGTC TCGGCGGACG CCGGCGCCCT 120  
 GTGCCGTGTC CACGGGTGCA TAAA 144

5 SEQ ID NO:1293

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10 CLONE:HUMGS01442

SEQUENCE DESCRIPTION:

GATCTAAATA TTTNNAGCT GAGTTATTAG GGAGTCATTA TTCTGTGGTA CAATGCTGCA 60  
 AAAAGCATCA TGTGGAAGAA TGGGAACAT GCTTACTTTA TGAAGTGATG TATAACACAA 120  
 TGAAATCTGT TTTACAACTA CAAA 144

15 SEQ ID NO:1294

SEQUENCE LENGTH:372

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS01443

SEQUENCE DESCRIPTION:

GATCTTGGTA GTATCCCTGG CTGCTAAGCC TATGGCAGGG GTGGTCCTTT CTACATTCCC 60  
 25 ATTCACTTAA CAGCTCTTTT GGGATTGGGT GTTTCATTCC ATTTCTGCCC ACTCCCTCTC 120  
 CTCTCCTCTC TGGTAGGTTT AATTTTATGC TTTCCCTGAT TCCAGCTTTC TGCTTCCTGA 180  
 GGACTCCCGC TCCCNCCACC CCAAAGTTTG TCTGTGGGTG TTATAGTGGT AACTGCAGTT 240  
 CCCTCCTCTG GGAATNGTAG GCTGTAATAG GNTTAATAAA CTCNACNTNC TCTAATCNTT 300  
 GCTNAAAANG TGGGGGTAAN GGGGATGGCN TTGNCCCNGG GTGGGAAANT TAAANNTGGT 360  
 30 GTTTANGGNA AA 372

SEQ ID NO:1295

SEQUENCE LENGTH:145

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01444

SEQUENCE DESCRIPTION:

GATCTTCTCT GTGGGGGAAA AGGAAGAGGA GGGTCTTGT CTCCANTNT GTTATTCTT 60  
 40 TGGGCTCTGG GAACAGGGGA CTACTTTGGG GCTTTCTCCA ATNCTNTTGT ATGNTGTTAT 120  
 TAAAAGCGAG CTATTGCATT TCAAA 145

SEQ ID NO:1296

45 SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01445

SEQUENCE DESCRIPTION:

50 GATCTTATAT CCTGTGACCT GTCTAAATTC AATCTGTTAG TTTTATCATT TTTAAAAAA 60

ATGTCCGTGT GTGTCTTCCT TGAGATTTTC TACATTATCA TGTCATCTGC ANATAAAGAC 120  
 ATTTACTTCT TTCTTTCCAA A 141

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SEQ ID NO:1297  
 SEQUENCE LENGTH:141  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01446  
 SEQUENCE DESCRIPTION:  
 GATCCAGTTG TACTAAGGTG TACAGGATAT TTGCAGATAT AGGTAACTG AATGAAGCAT 60  
 ATTAATAACT GCATTTCCT AACTTTGAAA AATTTTNCAA ATGTCTAGGT GATTAAAAA 120  
 ATGAGATTGG GCTATTGCAA A 141

15

SEQ ID NO:1298  
 SEQUENCE LENGTH:140  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01447  
 SEQUENCE DESCRIPTION:  
 GATCTAAAAT AGATATGTTG GATTGATATT CTCACGTGTT CGGTGTGGAA AACAAAACAA 60  
 GTACATGCTT TAGAAGCAAC AACAATGAAA TCCTTTTGAA ATNTGTGTTA ATATCGTTTA 120  
 NTAAAATACC TAGTTTGAAA 140

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SEQ ID NO:1299  
 SEQUENCE LENGTH:140  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01448  
 SEQUENCE DESCRIPTION:  
 GATCCATAGA AGGGCTTCCC AAACCTTGTT TTGCAACATC CCAAATTGTC TCCAGTTGAA 60  
 GGAAGGCCTT TATCAGATTC ATAGATGAGC TTTCATTGTA AAAATAAATG TACTTTGCAC 120  
 CACTTCATGA TGGAGGGAAA 140

35

SEQ ID NO:1300  
 SEQUENCE LENGTH:140  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01449  
 SEQUENCE DESCRIPTION:  
 GATCTGAGGT TTTTAGATT TAAATATTTA TGTGGAATTA ATTAAAGGTA GTTGGCTATA 60  
 TCGCTATCAT TTCATTCITT TGACATTATT TGAATATTTT ACTGGAAAAT AAGACTAATA 120  
 AATTGTTAAA AGTTTTTAAA 140

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SEQ ID NO:1301  
 SEQUENCE LENGTH:139

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01450

SEQUENCE DESCRIPTION:

GATCTTCACA AAGTTGTCTT TTCACTGTGT TTTGTCAACG TGAAATTAAA TTGTAGTTAT 60  
AAGCAAAAGT TGGTTGCCTA GGGAACAATT GTATATNCAG TTAAACAGAA ATAAAAGAAT 120  
ATTTGTCTTA AGATGCAAA 139

SEQ ID NO:1302

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01451

SEQUENCE DESCRIPTION:

GATCGNCACA TTTCCCAAAA ATAATAAAAA AATCACTAAC CTTTTTTAAG GAAAATATTT 60  
AAAGTTTTAC AAAATTCAAT ATTGCAATNA TCAATGTAAA GTACATTNA NTGCCTTATN 120  
AAAACTTTCC CAATTAAA 138

SEQ ID NO:1303

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01452

SEQUENCE DESCRIPTION:

GATCATTTTT TCGGTCTCCG AGGTGAAATG ACTTATTAAT TAAAATTTGT AAACACACAT 60  
ATGCATATTG TATATGTGA GAAATGTAAT CACACTTTGT CTTGGAATTA CATTAAACTG 120  
TTTGAAATCA CTGTAAA 137

SEQ ID NO:1304

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01453

SEQUENCE DESCRIPTION:

GATCTTTTTG TGATTGCTTT CCCGTCTCTA AGTAGTATTC TGTGTGTCT AGAGAACTGA 60  
TTTTTTCCTA CATACGCAAA TTGTACATT GTAAGTGAAA ATNTCAATAC ATTTAAAGCA 120  
TTANCCTAAA ANCAAA 136

SEQ ID NO:1305

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01454

SEQUENCE DESCRIPTION:

GATCAGCTGG GTTTGGCCA GGAAGTTGTC TTTGTGGACT CTGCCTGCAT GGCTTAGTAG 60



TTGAAGGAAA TTTTTTTTG GTTTTGTTT TTATAATTCA GTTAAATCAA TAAACATGTA 120  
TTTATTGACT GTTAAA 136

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SEQ ID NO:1306  
SEQUENCE LENGTH:136  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS01455

SEQUENCE DESCRIPTION:

GATCCCTTTA TGAGTTTTC TATTTGGCA TGCTACATGT AAGTTTGTCT TAATGTTTT 60  
ATGTAAAGCA TCTCCTCCT TTTACTTCTT TTATTGTGAT AAAATCATA TAAATTGAC 120  
CGTTTGAAG TGTAAA 136

15

SEQ ID NO:1307  
SEQUENCE LENGTH:136  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20

CLONE:HUMGS01456

SEQUENCE DESCRIPTION:

GATCTGGGCC CGACCCTCAC TACCCTGAG ATATTAGTTC CCAGGCCTGT TTTCCACAG 60  
GATTGTGGG TCTCTGCTTC CTTAGTCGGA AGTNTTTCATA ACTAATCAAA TAAATGAATG 120  
AATGATGAAT AAGAAA 136

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SEQ ID NO:1308  
SEQUENCE LENGTH:135  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS01457

SEQUENCE DESCRIPTION:

GATCCCAAAG ATATTAAATA TATGCAAATA TTCCAAAGTC TGAAAAATC CAACATCCAA 60  
AAACACTTCT GACCCAAGCA TTTCAGATAA GGGACCAGAA TTATTAGATT AAATAAGGTA 120  
TATTATTAAG TTAAA 135

35

SEQ ID NO:1309  
SEQUENCE LENGTH:135  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS01458

SEQUENCE DESCRIPTION:

GATCAGGCCA AGAGGTTGCA CAGGGCATGA TACTGCACCC TGCCTGACCC AGCTGGGCTC 60  
ACAGGTCAGG GGAGAGTTGG GGCAGGTGAA TGTCAGCATC AGGCTTCTNN TTTAAACTT 120  
TTAAANAAAT ACAA 135

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SEQ ID NO:1310  
SEQUENCE LENGTH:135

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01459

SEQUENCE DESCRIPTION:

GATCCTGCCT CAAAAAAAC AAAAAATTC TTTATTTTCT CCATAAACTA CAGTTTATAT 60  
AAGCAAAAGT TTCAGTACTA AGCAATTNA GTCTCTGCAG TCTCTNGTNT TGANTTAATA 120  
CAACTTTNGT NAATN 135

SEQ ID NO:1311

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01460

SEQUENCE DESCRIPTION:

GATCTACCTG TGGCCCGGCC TCCCTAATGT NATTCACATT GAATGGGGAT GAGGTCGGAC 60  
AGTGGCTCAT AGAGCGAGTA TGAGCCCTAG CTGTGGGCTA GAAATNTCCT TAATAACAT 120  
CCTTATTTTC NTNTTAAA 139

SEQ ID NO:1312

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01461

SEQUENCE DESCRIPTION:

GATCCTAGTA TGTGATAGC TTTNATTTG TGAGTGGTTT ACTAGTCATT TATTATGATT 60  
CCCATGANCT CTGATATGAT TCATTGTGGT TTTAACTCAG GTTGAATAAA AGCATCCATT 120  
TCITTTATAG GAAA 134

SEQ ID NO:1313

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01462

SEQUENCE DESCRIPTION:

GATCTCAAGG TTGATAGTGG TGITCACTAG GAGACGTGGA ATTGAGACTA ATAACTTGGA 60  
TGTTAACACT GTTTACTGTT TTTTCACATG TAGAAATGTT CTTTGTGTAT TTTTCTACA 120  
GAGGATTTTC TCTGATTTTA TTTTCITTTG TTCTGACTCT AATAATTAGT TGGAACTCA 180  
TATAAAATGA GCTTTCCTAA ATTAATCTA TTTTAAATAA AGGTATTATAC TATTAAA 237

SEQ ID NO:1314

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01463

SEQUENCE DESCRIPTION:

GATCTATAGG TTTATTAGAA NCCTNACCAC AGNATCCAGA TTATCTTCAG TATTCTNTCA 60  
 GTACAGCTCT CTGCAGCTTA AACTCGGTGG TACATAAAGA AGATGATGAA CCCAAATGN 120  
 TGGNCACTGT ATAN 134

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SEQ ID NO:1315  
 SEQUENCE LENGTH:133  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01464

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SEQUENCE DESCRIPTION:  
 GATCAGAAAA TCCCTCTGAC ATCTCCACTG CCCCCAAAGA CCTCCGTTGA ACATTCTGTA 60  
 TGGAAAAGAG CCCTGGAGCA TCAGGTTCCC CAGATAGGCC CCCAAATAAA GACCTGTCTA 120  
 TGGCTCTCCC AAA 133

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SEQ ID NO:1316  
 SEQUENCE LENGTH:132  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01466

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SEQUENCE DESCRIPTION:  
 GATCTAGCTG GCTGTAGTAT TGCNTTGATA ATTTTTTCT TTAAATTTAC CTAATATATA 60  
 TAAGGAAGGG GTTTGGATAT ATTAATAATAG GTGTTAATT TATCTATTTA CCAATAAATT 120  
 CATCTCTTTA AA 132

25

SEQ ID NO:1317  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01467

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SEQUENCE DESCRIPTION:  
 GATCCAGCCA TTCCTGAAGC CCACCCTGCA CCTCATTCCA ACTCCTACCG CGATACAGAC 60  
 CCACAGAGTG CCATCCCTGA GAGACCAGAC CGTTCGCCAA TACTCTCCTA AAATAAACAT 120  
 GAAGCACAAA 130

35

SEQ ID NO:1318  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01468

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SEQUENCE DESCRIPTION:  
 GATCTAAAAG CCAACTTTTT CTCAGTNTTA CTCAGTGGAA AGATAAACTA AGTTTTAATG 60  
 TTATNTTTTT AAATNTAAGC AAAATTTATT TCTGTNCTNT AATAAATAAG AAAATGTGGT 120  
 CCACTGCAAA 130

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SEQ ID NO:1319

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SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01469

SEQUENCE DESCRIPTION:

GATCCCCCTGC TCCTGTTGTG TTCTGTTGTA AATCATTGG CGAGACTGTA TTTTAGTAAC 60

TGCTGCCTAA CTTCCCTGTG TTCTATTGA GAGGCGCCTG TCTGGATAAA GTTGTCTTGA 120

AATTTCAAA 129

SEQ ID NO:1320

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01470

SEQUENCE DESCRIPTION:

GATCAGAATT TTAAAGCAG AATTTTGTC AAAGGGTCAT TTTTGTCT ACCCCITTTA 60

CACTTTTCAG ATTCTCAAAG TGTCTCATCT CAACTTTTAA AAGAATAAAG AATATCTTGC 120

TGGGCAAA 128

SEQ ID NO:1321

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01471

SEQUENCE DESCRIPTION:

GATCCTTGTC AGATGAAAAT GGATTCACAG CTCTGGCAGT TCCCAATGTC TGGGGAGGGG 60

TATAGGTTTG AAAGGCTGTT TGAAAGAGGA ATGTTTAATA AAGGCTTTGA TTAAATCTTG 120

AAAAGAAA 128

SEQ ID NO:1322

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01472

SEQUENCE DESCRIPTION:

GATCTCGAAG TNACTCCGGG CTGAGCAGTG GGGCGGCTGG GGGAGGGGTG ACGATTCTCC 60

TCAGGCTTTG GCCCTGCAAG CAAACCCACA TATCTNCTCT GTATGTAATA AATNTNTTAA 120

CGTCGAAA 128

SEQ ID NO:1323

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01473

SEQUENCE DESCRIPTION:

GATCCTGAAG CNGCACTTAC CTNTGAANAG TCTTCAAACCT TTTAAACCTT GCCAGTNAGG 60  
 ACTTTTNTCTA TTGCAAATAG AAAACCCAAC TCAACCTGCT TAAGCAGAAA ATAAATTTAT 120  
 TGATTCAAA 129

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SEQ ID NO:1324  
 SEQUENCE LENGTH:127  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01474

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SEQUENCE DESCRIPTION:  
 GATCTGTGAA GTTATTTTGT AAGGACATAC ATTTGGTAAG TAAGTTTGTG TCCCAGGAAA 60  
 TGTATGTNTT TTTAAACCTT TTCTAAATAT GCAGGCCATT AATAAATAAG ATTGTTTCTT 120  
 CCCTAAA 127

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SEQ ID NO:1325  
 SEQUENCE LENGTH:127  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01475

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SEQUENCE DESCRIPTION:  
 GATCAGAGAG ATTTTNTTTT TAAACTACCA TGGTCCCAGG ATTCCATCCT GAAATNAATT 60  
 TTCCTTTGTA TGAATATGTG TAAATAATTT AAAAATAAAA CTGTAAAAANA TTTGTNCGAA 120  
 GAATAAA 127

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SEQ ID NO:1326  
 SEQUENCE LENGTH:137  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01476

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SEQUENCE DESCRIPTION:  
 GATCCCCCTT CATTGATGT TTGGAAAATN CCAGTAATTA TCATTTTTC AACGAATATG 60  
 GATACCACAT AGTACTTTGG TGTACCTGC TTTTGAAAAA TAAAGTCTTT GGTTCACCCG 120  
 GTGAACTATT TATGAAA 137

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SEQ ID NO:1327  
 SEQUENCE LENGTH:126  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01477

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SEQUENCE DESCRIPTION:  
 GATCCTCAGC CTCCCAGTGG TCTTTGTAGA CTGCCTGATG GAGTCTCATG GCACAAGAAG 60  
 ATTAACACAG TGTCTCCAAT TTTAATAAAT TTTGCCCCAT TTCTATTAA AAAAATTGT 120  
 TGTAAA 126

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SEQ ID NO:1328

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SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01478

SEQUENCE DESCRIPTION:

GATCCATCTG TGTAGTTTCT GAACAGTCAG CGATTCCAGG TTTTAAATAG TTTGTAAATT 60

TTCAGTTTCT ACACACTTTA TCATCCNCTC GTGATTTTTT AATTAAAGCG TTTTAATTCC 120

TTTCTCAAA 129

SEQ ID NO:1329

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01479

SEQUENCE DESCRIPTION:

GATCCATGCT TTA CTGTGTT TAATGGGGGT AACAGGGGTC CCTACAGCCC TCCCAGCTAA 60

ACATTGGGAA CAAAACACCA GCCCTTTTGT AGTGGATGCA GAATAAAATT GTTAATCCAA 120

TCAA 125

SEQ ID NO:1330

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01481

SEQUENCE DESCRIPTION:

GATCTGTGTT GAAAGTNGTA TATTTTATC TGTNCGGTGC TGAGTGCAGG CCACCAGCTC 60

CTAAATAGAG GTTCCTATA TGC GCGTATG ACATGGTGAA TAAACACAAC TCTCTCCACT 120

CAAA 124

SEQ ID NO:1331

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01482

SEQUENCE DESCRIPTION:

GATCGTTGTA ATTNNTTGAC ATTCCTTTNA GAAGTTGTGA AATGTTACAA CTTGTNCTTA 60

TGTAGACACA ATCTCCTGTC TCAGTACAGA GGCAGTGACT TCAATAAAGT CTATTTATAC 120

TAAA 124

SEQ ID NO:1332

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01483

SEQUENCE DESCRIPTION:

GATCAAAAAA TGGAAATGTA TAATTAATC ATACTTAGCA AATCTAACAC ATGAAATGTA 60  
 ACATCTGCAT ATGGAGAATC GTGTTACTTT ATTGAAAAAC ATTAAANGTT TGAGANCTTA 120  
 AGTTGGAAA 129

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SEQ ID NO:1333  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01484  
 SEQUENCE DESCRIPTION:  
 GATCTGCCAA GATTCTTTGA ATACAGATAA TTAATGTAAA CAATTATCAT AAGTATACTA 60  
 ACATGTTATN CTTTTTAAAT AAGAAGGTAT AATAAAATAT CCCATTGGTT TNATGTATTA 120  
 AA 122

15

SEQ ID NO:1334  
 SEQUENCE LENGTH:122  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS01485  
 SEQUENCE DESCRIPTION:  
 GATCGGGCCN TTGGCTGTAA GACCCGACCC TTCGAGAACC CGANACGAAA CGCTCCATTA 60  
 CCACTGCNCA GTGAGATGAG GGA CTCACAG TTCCAAGAGG NTTCTTTCCC GTGGNCCCCT 120  
 NN 122

25

SEQ ID NO:1335  
 SEQUENCE LENGTH:121  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01486

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SEQUENCE DESCRIPTION:  
 GATCCAACCC TGTACTGATA GTACTTCCCA GTATGATATT GTGATGTTTC ATACAATGCA 60  
 GTGAACATAA CCAACTTGTT ACCTAAATAA AGANTTGATA AAAACAGTGT GACATATTAA 120  
 A 121

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SEQ ID NO:1336  
 SEQUENCE LENGTH:120  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01487

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SEQUENCE DESCRIPTION:  
 GATCAAGGTC TGCAAGGGAA TTCTTGTTG CTGCTTTCCA TTGACACCG CAGTTCTGTT 60  
 CAGCCATCAG AAGAGAGACA AGGNATTAATA AATTCTTTT TAATCNGTT ACCAAATAAA 120

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SEQ ID NO:1337  
 SEQUENCE LENGTH:119

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01488

SEQUENCE DESCRIPTION:

GATCTAGTAG GCACGTCTGT CAACAGGACA CATGCCTCCT CTGACTATAA CCTCTTAATA 60  
GTTGTGTATA ATGAAAAC TG TAACTTTTT TAAATAAACN GTGTATATAC CTTGGCAAA 119

SEQ ID NO:1338

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01489

SEQUENCE DESCRIPTION:

GATCCTGAAG CCATGGTTTC TTCCCTGCCA GAAATGAAAG GTTCAGTTAT GAGGCAACCC 60  
TCTAGTAAGG CATTGTAAAA GTTACTGGAT TTGGTTTAAT AAAAGTTGAA ATAAAGTAAA 120

SEQ ID NO:1339

SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01490

SEQUENCE DESCRIPTION:

GATCTTCCGA GTGCTTGGGG CCCACAGAGA CATCATCCTG GAGAGCATTG CCACTGACAA 60  
CCCAGAGGCG CACAGCAACC TCTACATCCT CACGGGCCAC CAGAGCACCT ACTAAGAGCA 120  
GCGGGCCTGT CCAGGGGCTC CCCGNCAC CCCACGCCCT AGCTGCAGGC CCTTTTGGGC 180  
AAAGGGGCCC ATCCTGGGCC ATCCATTCCA TTTGTTCCTT CATTCTTTT CTTCTTTT 240  
TGCCAAGAGN CTGCCCTGC ATTTGTCCTG GGAAACACGG TATTAAAGAG AGAACTATAT 300  
TGGTATTAAA GNTGGTTTGT TN 322

SEQ ID NO:1340

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01491

SEQUENCE DESCRIPTION:

GATCTTTGGA GCAAAAGCCA ACGGCAGGAA AAAATAGTTT GTACCAGTTT CATGAAGTAT 60  
GTCTTTGGGT TTTGTAAAT AATTTAACT CAAATAAAAT TGCTACTTTC AATACAAA 118

SEQ ID NO:1341

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01492

SEQUENCE DESCRIPTION:

GATCAGAATN AAATNTGTAT AGAGCAGAGT TTTAAATGA ATGTAAATAG CACTAAACGT 60



NTNCTTTCTG CAACCTGTAC TTACAGATTC TCCCTGTAAA CTAATAAAAA AAAAAANTN 118

SEQ ID NO:1342

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01493

SEQUENCE DESCRIPTION:

GATCACAAAA TGTGCATGAG NGTTATTNAC TTTATTCTNG TACAGTACTA GGATTCCTGT 60  
AACCACTCTT TTTTCTTC GNGGTATTGA AAAGTGGTC AGTGTTAACC AGGCAAGN 118

SEQ ID NO:1343

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01494

SEQUENCE DESCRIPTION:

GATCAATTCA CTAAAAAGNA TGGCCCANAT AGCACNNATA GGACCAAGGG ACACATGTAG 60  
TCANTTTTAA AAAACATGTA CTTGGTCTTT TGTGTGTGTC TGTATATTC CATTAGAN 118

SEQ ID NO:1344

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01495

SEQUENCE DESCRIPTION:

GATCCCAGGA GAGCTGGGCT ATGACTGCAA TAAGGAGTTG TTCCTTCACC TGAGATGTGC 60  
TTCTTTTGGT TCATTCTGG CTTGACAACA AGAAATAAAC GTGGTATGTT CCTGAAA 117

SEQ ID NO:1345

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01496

SEQUENCE DESCRIPTION:

GATCTTGAGG GACCCAACAT TTGTAGGGGC ACTAATCCAG CCCTTAAATC CCCCAGCTTC 60  
CAAACCTGAG GCCCACCATC TCCACCATCT GGTAATAAAC TCATGTTTTT TCTGCTAAA 119

SEQ ID NO:1346

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01497

SEQUENCE DESCRIPTION:

GATCAGATTT GGGTGGGAGA AAGAAGTGGG TATCAAGGGT GATTGAATT TTCTGCAGCA 60

TTAAAGTGGC GTTAATAAGA TAAGTAATAA TAAAGAATTC TAACATCCAT GTCAAA 116

SEQ ID NO:1347

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01498

SEQUENCE DESCRIPTION:

GATCCGGTGG AAATCCAAGC TCTGGGCTGG TAATTTTAT GAGCATTTTC AGCTTTTGCA 60  
AATACAAAT ATAATNCTTT ACAAAAATAA ATTTTATNC TAATCTAAAT CTGAAA 116

SEQ ID NO:1348

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01499

SEQUENCE DESCRIPTION:

GATCTTCTCT ATGATTGATA CATGGCACAG TGAGAGATTA ATGGGCATTG TGTACAAAT 60  
GCTTCTCACC ATCCCATTA GACCTACGAA TAAAGCATCC GGTCTAAAA TTAAA 115

SEQ ID NO:1349

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01500

SEQUENCE DESCRIPTION:

GATCTTTTGG TAAAGGACC AAATGTTCTT TTATAAATGT AATAAGGAAT ATCTTGCTCT 60  
TTAAATTTA TTAGGNNTT AATGAGTAAT TTNATTAAA AGATTCTTT TTTGAAA 118

SEQ ID NO:1350

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01501

SEQUENCE DESCRIPTION:

GATCCTATTT GTTTCATTT ATTGTAAATN CCCATTTGCA TCAAAACCTA ATNATAGTGA 60  
TNGGTAAGTA AAAACAAATG GTGTATTGCT TTTCATACAA GTGTTTTCAC AAAAGCCATT 120  
TGCCTAGGCA GCAAAAAATA TTAATTTGTT AAAAAAATTT TTCCTTCGTG TCCATCCNCA 180  
NAAANTNGNG NN 192

SEQ ID NO:1351

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01502

## SEQUENCE DESCRIPTION:

GATCTGTGGA CTTTCATCAN ATTATGAGAC TNNCTCAATT TCATGACTGT ACTACCTGAA 60  
 ACAAAGTGAG AAAGGACAGG TGTATTTNN TAAGTCATCA AGATAAATCC TTAAN 115

5

SEQ ID NO:1352

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS01503

SEQUENCE DESCRIPTION:

GATCTTAGTT TGTAGCTTAT GACTTATTTA ATGAATGGAT GCCCAGCCAA GCTCAGAGTA 60  
 GGCGCCCAAA GCATTGTGGA TTATTTTCCT GTTTGTCTT TTTTTTTTTT TTTTNAAG 120  
 CCATGNCANC CCNGANGGGG CCAGNGANTN 150

15

SEQ ID NO:1353

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS01505

SEQUENCE DESCRIPTION:

GATCGNNAAG AGGTTACCCA GACCACACAC AGTTTGAGAA AACATNCCCA TTATNACCCA 60  
 TCTAGCAAAG AGGCACCCTA AGTGGTCCAT GAAGAGTTTA ATTTATNTT AAN 113

25

SEQ ID NO:1354

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS01506

SEQUENCE DESCRIPTION:

GATCGGGTTT AGACGNNAGN TCATTCAGTG AAGCAAGCCA AAAGCNCACA TTTGTATGCC 60  
 TTAGGTCTTC TTAATGTTT ATCTGTAAAC ATGTGTCCAA TATAAANCT ATN 113

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SEQ ID NO:1355

SEQUENCE LENGTH:411

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS01507

SEQUENCE DESCRIPTION:

GATCCTCCCT GCCCGCGAAG TGNACAGTTT ACAAATTAT TTTCTGCAAA AAAGAAAAAA 60  
 AAGTTAGGTT AAAAACCAAA AACTACATA TTTATTATA GAAAAAGTAT TTTTCTCCA 120  
 CCAGACAAAT GGAAGAAAAAG AGGAAAGATT AACTATTTGC ACCGAAATGT CTTGTTTTGT 180  
 TGCGACATAG GAAATAACC AAGCACAAG TTATATTCCA TCCTTTTAC TGATTTTTT 240  
 TTCTTCTATC TGTTCATCT GCTGTATTCA TTTNTCCAAT CTCATGTCCA TTTGGTGTG 300  
 GGAGTCGGGG TAGGGGTAC TCTGTGCAAA AGGCACATTG GTGCATGTGT GTTGCTAGC 360  
 TCACCTGTCC ATGANAATAT TTTATGATAT TAAGGNAAT CTTTGAAAA A 411

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55

SEQ ID NO:1356

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01508

SEQUENCE DESCRIPTION:

GATCATGGTG TAATAAGACA TAACGTTTT CCTTTAAAAA AATTAAAGTG CGTGTGTAGA 60  
GTTAAGAAGC TGTTGTACAT TTATGATTTA ATAAAATAAT TCTAAAGGNA AA 112

SEQ ID NO:1357

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01509

SEQUENCE DESCRIPTION:

GATCAAGTGC ATTTGACAGA AAAGTTCAGT TTCTTGGGAA GAAACACCTT TTAAGCTGAA 60  
TGGAGAAAAT NCCAAAATAA ATTATATCAC CACAATGGTG TATACTCAGA AA 112

SEQ ID NO:1358

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01510

SEQUENCE DESCRIPTION:

GATCTGGGAA AAAACAAGA GACTCAATGG AGACAGAAGA AAATCCCAAG GTTCTAATAA 60  
CTNCTTCTN AAAAANTATC TACCCCATTT GGTGAAGTGA AAANCAGAAA AN 112

SEQ ID NO:1359

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01511

SEQUENCE DESCRIPTION:

GATCCTGGTT GGAGTAAACA TTCCATGGGA ACTCGGGCTG TNAGAATNTC CTAACCACCT 60  
GANTGCAGAA ACATCCTTAT CACATCCTNC TGGGAAAGNC CAACAGCCTG AN 112

SEQ ID NO:1360

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01512

SEQUENCE DESCRIPTION:

GATCCATCAC CTGNGCAGCA TAACTGGCTT CNNCTCAGTC ATCCACACAA CACCAGGACT 60  
TAAGACAAAT GGGACTCCCT GTCATCTNGA GCTATNCATT TATTAAACT GN 112

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10  
SEQ ID NO:1361  
SEQUENCE LENGTH:111  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01513  
SEQUENCE DESCRIPTION:  
GATCCCTTCA TTGATGTTG GAAATTCCAT ATTACATTTT GCAGGATATG GTACACATAG 60  
TACTTTGGTG TACCTGCTTT TGAATAATAA AGCTTTGGTC ACCCGGTGAA A 111

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20  
SEQ ID NO:1362  
SEQUENCE LENGTH:111  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01514  
SEQUENCE DESCRIPTION:  
GATCAGAGAA TGCAGCAGCA GTTTTTTCC TNGTTTNCCT ACCACTTTAT TCTTTCANAG 60  
TTTAAAGAAA ATGGACTCAT GCACAGAACA CTATGCATTT NAAAACTNGT N 111

25  
30  
SEQ ID NO:1363  
SEQUENCE LENGTH:111  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01515  
SEQUENCE DESCRIPTION:  
GATCGGGGGC GTANATNCAT AGTAGTTTTT ACAGCTGTGT TATTCTTTGC GTGTAGCTAT 60  
GGAAGTTGCA TAATTATTAT TATNATTATN ATAACANGTG TGTCTTACGT N 111

35  
40  
SEQ ID NO:1364  
SEQUENCE LENGTH:110  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01516  
SEQUENCE DESCRIPTION:  
GATCTCAAAA CAGTGCTAAA ATCAAAGNTG TNGACTGTAA AGAAAAACAT GTATATATAT 60  
TGCACCTNAA AGTTGTCAGA AGNTAGAAAC TNAATAAAC TAACTTTAAA 110

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SEQ ID NO:1365  
SEQUENCE LENGTH:109  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01517  
SEQUENCE DESCRIPTION:  
GATCCACGC CACAGCCTTT TGNTNTGCAA CTGCCTTCTT CGGAAAGAAG AAGTGGGAGG 60  
ATGTGAATTT TAGTCTGAG TTTACCAAT AAAGAGATAT AAGACGAAA 109

SEQ ID NO:1366

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01518

SEQUENCE DESCRIPTION:

GATCATGTAC TGAAGTAGTT TAAGCAGGCT GGCTAACTTA GACTNATTGA TTCTGCNTTT 60  
GTACTNNAAT AGGGGTTATA ATTGTAAGAT AAAAATGTGT GTGTNCAAN 109

SEQ ID NO:1367

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01519

SEQUENCE DESCRIPTION:

GATCTGGGGG TTTCTTCATA TTCCTGCTGT TGGAAGCAGT TGACCAGAAA TGCTTGNCAG 60  
NACTGCCAAA GCACTGCTGT GAAATGTGAA GTACTTTGTT TTTTATTTT TAATNATTTT 120  
CTTTTGTTA TTAATATTTT TCTCTGTTCC TTTGTTATTA CTTGCATGGT TTGGCGTCAG 180  
AAGTCCTTAC CTCITTATAT TGTTGCAGG TTAAATAAAA ACAGTGTGGT GCCAAA 236

SEQ ID NO:1368

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01520

SEQUENCE DESCRIPTION:

GATCTTGAAG TTATTTTAA GACATACATT TGGTAAGTAA GTTGGTCCCA GGAATGTATG 60  
TNNTTNAAC CCTTCTAAA TATGCAGNCA TTAATAAATA ANATTGTN 108

SEQ ID NO:1369

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01521

SEQUENCE DESCRIPTION:

GATCCAACCC AAATCAAATT GTTAAATGCC CTCTTGAATT TTTTGTCTG TTATTTAATT 60  
ATATGGTGGA ATTAATAATA AAATAAACTT CATGTCTCTG ATTCAAA 107

SEQ ID NO:1370

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01522

SEQUENCE DESCRIPTION:

GATCTNGAGC TCTGTCTTCA GCAGATTTC A GGTGTAACAT TTGTAACTC GTACTNGAAG 60  
GTGTGTCTCTC AAGAAGAAAG TTTCAAATT AAAAAAGCTG CTGCAAA 107

5 SEQ ID NO:1371  
SEQUENCE LENGTH:107  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01523

10 SEQUENCE DESCRIPTION:  
GATCATGTAC ATTGTAACGT GTGTGTCAG TACTGCAGTT CCTCACTTT NTTGTCTNT 60  
NATTACCATG ACATTTTAA AGATACAGCT ATTTTNTCGA TGTNAAA 107

15 SEQ ID NO:1372  
SEQUENCE LENGTH:286  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01524

20 SEQUENCE DESCRIPTION:  
GATCACATCT AAAGCTTTAT CTTTGTGTAA TCTAAGTATA TGTGAGAAAT CAGAATTGGC 60  
ATAATTTGTC TTAGTTGATA TTCAAGGCTT TAAAAGTCAT TATTCCTGGG CTGGGTAAAGT 120  
GAATTTATGA GATTTACTGC TCTAGAAAAGT ATAGATGGCG AAAGGACCGT TTTGTATTGC 180  
25 TTCCTGATTA CCAGTCTGAT TATACCATGT GTGCTAATAT ACTTTTTTTG TTATAGATTG 240  
TCTTAATGGT AGGTCAAGTA AAAAAAAGA GATGAAATAA TTTAAA 286

30 SEQ ID NO:1373  
SEQUENCE LENGTH:107  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01525

35 SEQUENCE DESCRIPTION:  
GATCCGCGCA CCTAAGCCTC CCAAAGTNCCT GGAATTACAG GCATGANCTA CCATNCCTGG 60  
CCTTCTAATG TTTTCNTAA TTAAGGCTCT NAACTTCCAA GACTGTN 107

40 SEQ ID NO:1374  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01526

45 SEQUENCE DESCRIPTION:  
GATCTAGAGG NGAGAAAAAG ATGANTTGCT CTTTACATTC GATAATCAGT GACCACGAAA 60  
CACTCAGACC AGAGCCTGGC TTATCAAAAA CCTTNAGTGA GNNCTN 106

50 SEQ ID NO:1375  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01527

SEQUENCE DESCRIPTION:

5 GATCCACGTG CCATTGTGGA GGCAGAGAAA AGAGAAAGGN TTTATATACG GTACTTATTT 60  
AATATCCCTT TTTAATTAGA AATTAAACA GTTAATNCNC TTCAA 106

SEQ ID NO:1376

SEQUENCE LENGTH:117

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01528

SEQUENCE DESCRIPTION:

15 GATCCTGAGC TCCCTTTGCA GTCTGAAAAA GGTATTGCAG TCAGAACTGT GTACTGATGA 60  
TAAANGCCTC TGGTAGCAAT AAAAAGTTGT CCCTAACAAA AGAGGCAAAA AAATAAA 117

SEQ ID NO:1377

SEQUENCE LENGTH:105

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01529

SEQUENCE DESCRIPTION:

25 GATCCAGCAA ACAGGTTCTN TTAAAGAAAA ATAATTTATA CTAAATTNAG TAAAATGGAC 60  
TTCTTATTCA AAGCATCAAT AATTAAGA NITATTNAA TGAAA 105

SEQ ID NO:1378

SEQUENCE LENGTH:105

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01530

SEQUENCE DESCRIPTION:

35 GATCAGCAA ATGAGATAAA TGTTTCTNTT TTCCTTTCTG ACTGCATTAA ATCAGATACA 60  
ACTCAGCATT AAAAAGCTAT CTNTGTAAT NTNGTNACTA ATAAN 105

SEQ ID NO:1379

SEQUENCE LENGTH:105

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01531

SEQUENCE DESCRIPTION:

45 GATCTAACAC GAGGAACATA TCATGGAAAG TGCATNGTAT NTATTTTAGG GTTATGAGTT 60  
CTTTCAAGGG CTAAGNTGCA GAGNATTTC TCCANGAATC GTGTN 105

SEQ ID NO:1380

SEQUENCE LENGTH:105

50 SEQUENCE TYPE:nucleic acid

55



TOPOLOGY:linear

CLONE:HUMGS01532

SEQUENCE DESCRIPTION:

5 GATCAGGTGA CATGAGGGNT CACTCTTCTT GTTGACANN CTGTGAGTTC GGGCAAATNT 60  
GTAATGGCAT ATCTCCACTA TTACAGTNTC ACACAGAATT ATTTN 105

SEQ ID NO:1381

SEQUENCE LENGTH:332

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01533

SEQUENCE DESCRIPTION:

15 GATCGGTGCG TTCTCCTGAT GTTTNCCNT GGCTTGGGGA TTGTACACGG GACCAGCTCA 60  
CGTAATGCAT TGCCTGTAAC AATGTAATAA AAAGCCTCTT TCTTTTGGG GTGGNNNTTG 120  
TCCTTCTGTC AGCTAAATG GGAGCTCATG AGAGAAGGAC GTCAGGGAAA CGGGGTTGAG 180  
GGTGGTCTCG GTGCAGAGAG AAGGGTGTCA GGGAAACGGG GGGTGAGGGT GGTCTTGGTG 240  
20 CCAGACGTAG GGAATGGTGT TGGGAGTGGC CCGAGTGCCT GGCACAGTTG TCTNGTTCAT 300  
TCATGTAACA TGATAATTTT TAAATCATTAA AA 332

SEQ ID NO:1382

SEQUENCE LENGTH:157

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01534

SEQUENCE DESCRIPTION:

30 GATCCTGCTG CTGTAATGGG AACCCCTCCC CCATTACTT CTCCACCTCC CGTCCTCCCC 60  
ATCATTGGTT TTTTTTGTG TGTCAACTGT GCCGTTTTTA TTTTATTCCT TTTATTTTCC 120  
CCCTTTTCAC AGAGAAATAA AGGTCTAGAA GTAGAAA 157

SEQ ID NO:1383

SEQUENCE LENGTH:103

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01535

SEQUENCE DESCRIPTION:

40 GATCTACTGT TTGTTGAAGT GTGGGAAAAT AGCCTCTCTA AGGCAGCCCA GATGGGACCA 60  
AAATCAGTAC AAACATATTT AAGTAAATTT TAAAATGCGT AAA 103

SEQ ID NO:1384

SEQUENCE LENGTH:284

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01537

SEQUENCE DESCRIPTION:

50 GATCCCCTTG TCCCTGGAGT AGGGACTAAC TATAGCACAA AGTAATATGT GCCAATGCTA 60

55

TTTGTGAAAT GTTTGGGCTT TCTAAACGAC TAAAGGATTT GTNGGGTTTT TNCTTAAGTT 120  
 TTGAACCAAA TCCTAGAGCC AGCTGATAAT ATTTAATAAT CTAGAGGAGA GAATAATGAT 180  
 GTACCANTAA GTGGAGATTC CTCCTTATGA TGTATGCTAG GTTATGGAAG ATGTAAAATA 240  
 TTCAACTTTT TCCTNCGTTT TTTGGACTTT GTATTTTACT GNAN 284

SEQ ID NO:1385

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01538

SEQUENCE DESCRIPTION:

GATCTGGAAC TCCTAAGCCA TCTACTCCTA CACCAACCNN TTCATCGAAC NCACACCCTN 60  
 CTNATGCTCA GAGCTCAACT CCTAGTACCC CTTAGCCAC CCN 103

SEQ ID NO:1386

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01539

SEQUENCE DESCRIPTION:

GATCGCCGTT CTGTTTGCA TNNTCCCACC GGGAGTTGCC NGGCAGGAGC ATGGGGTGCT 60  
 TGGTTGTTTC CTTCTAATA AAATAAACGC GGGTCGCCAT GAAA 104

SEQ ID NO:1387

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01540

SEQUENCE DESCRIPTION:

GATCTTAGCC TTAGGGTAAG TAAAATGGGT CTTTAAATAT AANAGTGTGA AACTATTTTC 60  
 NATCTAATAG TACTCTTTN AATAAAAGTC AGTAGTNGGA AA 102

SEQ ID NO:1388

SEQUENCE LENGTH:378

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01541

SEQUENCE DESCRIPTION:

GATCCTNGGT TTTGTGGTT TGACTTCTAT GGNGTTTTAA AAAACACAG ATTTTATGTT 60  
 TTAATATTGT GTAAATGTAC TCACCTTAGG GATTCAATTG AATGATGGTN TTATACCATG 120  
 ATTGNTTACA GTTTGTGAAA TTGTTGCAAG GGCAAAGATA ACTCTAAAA AACCGTCGAG 180  
 ATTACAATGC TCTAGAATCA GCATATAAGA AAATAAATGA TATCTNCATG TNGANTNNGG 240  
 GTGGATGGGG GGAGCAGGCA TAATTTTAA GTGTGAAGCT TTGCATCANA GAAATTATTA 300  
 AAANGCTTTT TTNCTCCNGT ATNTTCCTGT ATTAATCCTT AATGTTTATG GCAATAAAAA 360  
 TGTAAGGGGN ACATGAAA 378

SEQ ID NO:1389

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01542

SEQUENCE DESCRIPTION:

GATCGTAACC GTAACCGTAA CCGNNAAGCA CAAACGGGGG GAGCGGGGCA GTGAGCGGGG 60  
CAGGNATGAG NCCCGAGGTG GGGTCGGTGG CCAGNACAAC GN 102

SEQ ID NO:1390

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01543

SEQUENCE DESCRIPTION:

GATCCAGAGG TCCNNGTCAC TTGGAGAAAAG NCCAGTCCCT GNGACGGGGC AGCCCTCTNT 60  
GTCCCTCGGG CAGCTCGTGT GAATCCTGGG ACCTCTCCG GN 102

SEQ ID NO:1391

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01544

SEQUENCE DESCRIPTION:

GATCTCAGCA ATTTGAACAC TAACCTCTCC CCTCCTGGCT CAAGAATTAC TCCGAAGTCA 60  
GTCTGCAGAA AATAAATATT TAGTATGACA TGACACTTAA A 101

SEQ ID NO:1392

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01545

SEQUENCE DESCRIPTION:

GATCTACTCA GGCAACNACC AATCTTCTAN TCTGTCACTA TAGATTAATT TGCATTNTTA 60  
AAGAAATNNA CATACATGGA ACCATACATC ATCTATGCTT N 101

SEQ ID NO:1393

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01546

SEQUENCE DESCRIPTION:

GATCCTAGGA AGTNTGTCCC TGTCTCCCT GTGCAGGGTA TCCTGTAGGG TGACCTGGAA 60  
TTCGAATTCT NTTTCCCTTG TAAAATATTN NTNTGTCTCT N 101

SEQ ID NO:1394

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01547

SEQUENCE DESCRIPTION:

GATCCACGTG CCATTGTGGA GGAGAGAAAG AGAAGTGTTT ATATACGGTA CTTATTTATA 60

TCCCTTTTAA TTAGAATTAA AACAGTTAAT TTAATTCAAA 100

SEQ ID NO:1395

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01548

SEQUENCE DESCRIPTION:

GATCTTAGGT TACATAAAGT TTCTAAAGTT TCAAAGAGTC TTGATACAAA ATCAGTTTAT 60

ATTCTGAAAA TATTTATAAT AAAGTATTCT AATTTCATAA 100

SEQ ID NO:1396

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01549

SEQUENCE DESCRIPTION:

GATCAATTCT TCAATTTGAT TGAAGTGTTC AGCCTTTTCA AGATTCTTTT ATTTACAAAT 60

GATTACATTT AAATGAATGT ACATTCTTCT CACTGAAA 98

SEQ ID NO:1397

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01550

SEQUENCE DESCRIPTION:

GATCTGTAAAC ATTTGTTTCA AAATGCTGTT TCATTTTAT AAAGTACCAG TGTTTAGCTG 60

CTTTTATAC ATTAAATTAG CAATTGAAA AACTCAAA 98

SEQ ID NO:1398

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01551

SEQUENCE DESCRIPTION:

GATCCTCAGT GTCCTTACCC CCTCCTACCT CTTTCTGTG CCACCTGCTG TGGGTCCAGC 60

AGGCNTTAC TTGAGTACAA TAAAAAGTCT GAGTCAAA 98

SEQ ID NO:1399

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01552

SEQUENCE DESCRIPTION:

GATCCAAGTG TAGTGGGACC CCCTACTAGG GTCAGGAAGT GGACACTAAC ATCTGTGCAG 60

GTGTTGACTT GAAAAATAAA GTGTTGATTG GCTAGAAA 98

SEQ ID NO:1400

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01553

SEQUENCE DESCRIPTION:

GATCTCCAAA GTGGTGAGTT TATGTGTGAT TTTTATTTTG TTTATGCTCT TCTGTATTTT 60

CCGAATTTC TACAATAAAT ATCTGTTACT TTTACAATAT GAAA 104

SEQ ID NO:1401

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01554

SEQUENCE DESCRIPTION:

GATCCAGAGA GTTCAAGGGA TTGGGGAAAG AGAGGCGTCA AGTCATTGTC ACTTTGTACC 60

TGTAAGTTAG GTAATAAACT ATTATACTCG TAAA 94

SEQ ID NO:1402

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01555

SEQUENCE DESCRIPTION:

GATCTAGTNT CTNGCATTTT TATTATGTTG CTATATACTT TTGTTATCCG TATACTAAAA 60

AAAAAGAATA AATAAATGTT TTGATTGTTA AA 92

SEQ ID NO:1403

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01556

SEQUENCE DESCRIPTION:

GATCTNTACA TTCTTCAGAC TCATCGTGTG TTGANAATT TTTATAATGA ACATATATCA 60

TTTTNNTTAG AAAAGAATAA AGTTTTTGAA AA 92

SEQ ID NO:1404  
 SEQUENCE LENGTH:119  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01557  
 SEQUENCE DESCRIPTION:  
 GATCCTCTGG GGAAGCCAGG ACCAGGAGAG AAGCAAGGTC AAGAAATCCC ACAGTTTGAT 60  
 GTATTAAAGA AATNACTTAT TTCTACTCAA AATAAATGGC ATTGAAGTCT TTCTTTAAA 119

SEQ ID NO:1405  
 SEQUENCE LENGTH:90  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01558  
 SEQUENCE DESCRIPTION:  
 GATCTTGTGT CTCTCTCCA TCTCTGCCTT TGTTACCAGT GTGCATGTGT TTGTGTGTTT 60  
 TTTAATAAAA TATTGACTCG GCCAGTTAAA 90

SEQ ID NO:1406  
 SEQUENCE LENGTH:90  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01560  
 SEQUENCE DESCRIPTION:  
 GATCTGTTAT GGCATTCCT TCCAGATTAA TTTCCGTGT TTGAAGTATG TNCATATGTN 60  
 CTTTACAGAA TAAACATCT GAATTTTAAA 90

SEQ ID NO:1407  
 SEQUENCE LENGTH:87  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01561  
 SEQUENCE DESCRIPTION:  
 GATCCATTTT CTTTCAAAAT TTTCTTTATT GTAAAGTATG CAAAATATAT ATTCATACGA 60  
 TTTATTAAAT CAGAAATGTTT ATACAAA 87

SEQ ID NO:1408  
 SEQUENCE LENGTH:85  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01562  
 SEQUENCE DESCRIPTION:  
 GATCTGGAAT CCTTTTCTG CATTGACAAG GACCACAGCT AAAGGACAAT AATATGAATG 60  
 ACTCATTAAT ATCTCAAAAC TTAAA 85

SEQ ID NO:1409  
SEQUENCE LENGTH:85  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01563  
SEQUENCE DESCRIPTION:  
GATCCAAGTT ATTTNAGAA GAAAAACCTA ATTGAACAGG TATGGGTTGG GAGCATAATA 60  
AATGTGTTTT GAGAATTGTT CTAAA 85

SEQ ID NO:1410  
SEQUENCE LENGTH:84  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01564  
SEQUENCE DESCRIPTION:  
GATCATTATT TCATGACTGG TGGGTTCCCTA AACTCTGAAA TCAGCCTTGC ACAAGTACTT 60  
GAGAATAAAT GAGCATTITT TAAA 84

SEQ ID NO:1411  
SEQUENCE LENGTH:84  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01565  
SEQUENCE DESCRIPTION:  
GATCTAAGCC CATGAGCACA GGGACTGGCT ATCCCAAGAC CTGGCAGATG TGGCTGCTCA 60  
ATAAACACTT GTTGAACCAT CAAA 84

SEQ ID NO:1412  
SEQUENCE LENGTH:86  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01566  
SEQUENCE DESCRIPTION:  
GATCACCCAA GGGTTTTTTT GTGTCGGACT ATGTAATTGT AAATAATACC TCTGGTTCCC 60  
CATTAAAAGT NCCCATTTNA GTTAAA 86

SEQ ID NO:1413  
SEQUENCE LENGTH:83  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01567  
SEQUENCE DESCRIPTION:  
GATCTGTGTT TGATCCCTT TATGTAATGT AAAATTTAAG GGTATTTTGA TTCTAAATAT 60  
GATAAAATAA TTTCTCACCT AAA 83

SEQ ID NO:1414  
SEQUENCE LENGTH:83  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01568  
SEQUENCE DESCRIPTION:  
GATCAGCAGT CCACCACAAA AGCTTCTGTT AAAAGACCCT ACACAAATGC ACAAATTCAG 60  
ATTAAACAAG GAAAAGACGG AAA 83

SEQ ID NO:1415  
SEQUENCE LENGTH:83  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01569  
SEQUENCE DESCRIPTION:  
GATCTTGGTG TTCAAAACAG AACTGTATTT TTGCCTTTAA AATTAAATAA TATAACGTGA 60  
ATAAATGACC CTATCTTTGT AAA 83

SEQ ID NO:1416  
SEQUENCE LENGTH:82  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01570  
SEQUENCE DESCRIPTION:  
GATCCTTCTG TAAAGGTTTT TGGAATTATG TCTGCTGAAT AATAAACTTT TTTGAAATAA 60  
TAAATCTGGT AGAAAAATGA AA 82

SEQ ID NO:1417  
SEQUENCE LENGTH:86  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01571  
SEQUENCE DESCRIPTION:  
GATCTGCATA TTTCTGTATA TTGTGCATGA CAGTGCTTGC ATCCTATTG GTGTACTCAG 60  
CAAATAAACT TTTCAATTTA AACAAA 86

SEQ ID NO:1418  
SEQUENCE LENGTH:81  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01572  
SEQUENCE DESCRIPTION:  
GATCCCAACA TGGTCCTAGC ACTGCACACT CAGTTTTNCT CTAAGAAGCT GCAATAAAGT 60  
TTTTTNAAGT CACTTTGTAA A 81



SEQ ID NO:1419

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01573

SEQUENCE DESCRIPTION:

GATCTTCANT TAATCNCAC TTA AAAAATGA CAAAACATG TCTTCTTGA ATTAAC TTTG 60

AATAAAAGTT TGTATATTAA A 81

SEQ ID NO:1420

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01574

SEQUENCE DESCRIPTION:

GATCAGAGCT CAGTTCCTGT AGAAAACGAA CTGTAAAAGA CCATGCAAGA GGCAAAATAA 60

AACTTGAAGT GAATGCTTAA A 81

SEQ ID NO:1421

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01575

SEQUENCE DESCRIPTION:

GATCTTGGGT TTGGTCTACC CACCCAAGAG AAAAGACTGT TAACTGGAAG AAAAAATATA 60

TATATNNAAT TTTATGTAAA 80

SEQ ID NO:1422

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01576

SEQUENCE DESCRIPTION:

GATCACAATT ACCTTTAGTT GTTTTTTTTG TAATAATTGT AGCCAAGTAA ATCTCCAATA 60

AAGTTATCGT CTGTACAAA 79

SEQ ID NO:1423

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01577

SEQUENCE DESCRIPTION:

GATCCTTATG AATGACAGGT TACTGTTTTG CCTTATTGCT TAACTTAATG TAGTGAAATA 60

AAGCAGACAA AGCTTGAAA 79

SEQ ID NO:1424

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01578

SEQUENCE DESCRIPTION:

GATCTTCTGC ATGAGACCTG GAGTTGGGGA AGCAAGGTTA CATTGTATT NGTTTATCCT 60

ATGAATACTN TTCTTCAA 79

SEQ ID NO:1425

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01579

SEQUENCE DESCRIPTION:

GATCAGGCAG TCTGCTCAGA TACATTGAGT GCGGATTTTA AGTTTTGTTT TGAATAAATA 60

AACAGATTAA CCGCAAAA 78

SEQ ID NO:1426

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01580

SEQUENCE DESCRIPTION:

GATCTAAATT TCTAATGTGT TCTATGGGTT TCAATTCTGA AAAAAGAAAA TGAATAAAGA 60

TTTAATAAA TATTGAAA 78

SEQ ID NO:1427

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01581

SEQUENCE DESCRIPTION:

GATCTTCATT GTGCTGGGTG CCAGGNCAGT NATCCATTTT AAAATTTGTA ATTCAATAAA 60

GTTTTTTTG TTNTTAAA 78

SEQ ID NO:1428

SEQUENCE LENGTH:77

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01582

SEQUENCE DESCRIPTION:

GATCTCCAGG CTGGCCTCC AGAGCAGCCC ACACCAACNC CAAAATAAAA AAATGTATAT 60

ATTCCTTTAG CTCTAAA 77

5 SEQ ID NO:1429  
SEQUENCE LENGTH:76  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01583  
SEQUENCE DESCRIPTION:  
10 GATCCCAGGG ACCTCAGTCG GCTTAATCAG AGTGTGGCAT AGAAGCTATT TAATGATTAA 60  
AGTCATTGC AGTAAA 76

15 SEQ ID NO:1430  
SEQUENCE LENGTH:76  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01584  
SEQUENCE DESCRIPTION:  
20 GATCAAACTT TTNATGTTCT TAATAAGCTT GCAATTGANT AAAATAGAAT ATAAAAATAA 60  
GGTGAAATAA TATAAA 76

25 SEQ ID NO:1431  
SEQUENCE LENGTH:79  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01585  
SEQUENCE DESCRIPTION:  
30 GATCCCAAGT ACAATGAAAA GTTTGCACTG TATGCTGGAC GGCATTCCTG CTTATCAATA 60  
AACCTGTTTG TTTTACAAA 79

35 SEQ ID NO:1432  
SEQUENCE LENGTH:75  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01586  
SEQUENCE DESCRIPTION:  
40 GATCTCCAAC NTTGAAAAAT ATACATGATG TGAAACTGNG GGTNCTATGT TAAAAATAAA 60  
TGTATGATAA CTAAT 75

45 SEQ ID NO:1433  
SEQUENCE LENGTH:74  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01587  
SEQUENCE DESCRIPTION:  
50 GATCCAAACA TTTTTTGTG TGTGTATGGC ATTGATGCAG AATAGAATAA AATTATACTT 60  
AAGTTCTTTT TAAA 74

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5  
SEQ ID NO:1434  
SEQUENCE LENGTH:73  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01588  
SEQUENCE DESCRIPTION:  
GATCCCGGCG CGGGAAAGTC ACAGAGCTGC CTGGGCTTGT ACCTGGNCAC ATAAAGCCCC 60  
ANTTTAAAGC AAA 73  
10

15  
SEQ ID NO:1435  
SEQUENCE LENGTH:73  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01589  
SEQUENCE DESCRIPTION:  
GATCCCANAG CNATAAAATA AAATTTTATT CAAAATAAC AAAACAAATT NATCTACTGT 60  
ACACAATCTG AAA 73  
20

25  
SEQ ID NO:1436  
SEQUENCE LENGTH:72  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01590  
SEQUENCE DESCRIPTION:  
GATCCCAGGC TTCTGCGGAC CGACGATACG TTAAATGTT GTTCTAGTAA AGTTTTCGAT 60  
ATGTTTCTGA AA 72  
30

35  
SEQ ID NO:1437  
SEQUENCE LENGTH:71  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01591  
SEQUENCE DESCRIPTION:  
GATCCCTTGG NGGNCIAGTT CGTATTTTGT TTTAAACTA TTTGTTAGAA TAAAGTAATT 60  
TTGCTAATAA A 71  
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45  
SEQ ID NO:1438  
SEQUENCE LENGTH:70  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01592  
SEQUENCE DESCRIPTION:  
GATCTTAAGT ATAAAAATT TGTAATTGGG CCTTTACTCT CTCATAATA AAGTATTTTG 60  
TTTATATAAA 70  
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SEQ ID NO:1439

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01593

SEQUENCE DESCRIPTION:

GATCTGTATT TTCTAAGTCC CCAGTTCTCC TGGCTCTCCT TTCTGAAATA AAGGATTGAA 60  
 AACNGAAA 68

SEQ ID NO:1440

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01594

SEQUENCE DESCRIPTION:

GATCTGTTTT TAAAAATCAT AAAGTGTGTG CAGACTCAAT AAAATCATGT ACATTCTGA 60  
 AATGAAA 67

SEQ ID NO:1441

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01595

SEQUENCE DESCRIPTION:

GATCAACAGT TACTGTNACT GAGTCGGCCC ATTCTGTITA GAAATATATT TNAAATGTTT 60  
 AGTAATTGAA A 71

SEQ ID NO:1442

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01596

SEQUENCE DESCRIPTION:

GATCTGCCAT TTCATGCCNT GTGACTACNN ATCATTGGCC CTGCAATAAA ATCATTTATT 60  
 TTAAAA 66

SEQ ID NO:1443

SEQUENCE LENGTH:64

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01597

SEQUENCE DESCRIPTION:

GATCCTGCAT GCTACTCTTA GATAGAAGAT GGCAAAACCA TGGTATTAAA ATATGAATGA 60  
 TAAA 64

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SEQ ID NO:1444  
SEQUENCE LENGTH:64  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01598  
SEQUENCE DESCRIPTION:  
GATCAAGTCA CTNTTGACAA CATCCAGGNG AATATAAAAA CTTAATAAAG CTGTGGAAAG 60  
GAAA 64

SEQ ID NO:1445  
SEQUENCE LENGTH:62  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01599  
SEQUENCE DESCRIPTION:  
GATCAATTGG TTAACTTCT TTTATGTAAG TATGGTATAT AAATTTCAAG ACGAACACTA 60  
AA 62

SEQ ID NO:1446  
SEQUENCE LENGTH:62  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01600  
SEQUENCE DESCRIPTION:  
GATCACTTTT CACTTTTGG AATGTTTGT ATTGAAACTT AATAAACTT TAACATGGCA 60  
AA 62

SEQ ID NO:1447  
SEQUENCE LENGTH:62  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01601  
SEQUENCE DESCRIPTION:  
GATCGNTCTC AGGCCCTCCC CCCGGAGTAC TTCAGAATGC AATAAATCAA AATAATGGCA 60  
AA 62

SEQ ID NO:1448  
SEQUENCE LENGTH:62  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01602  
SEQUENCE DESCRIPTION:  
GATCTGTATG TGTCTATTG AGCACAAGGA AATAAAATTT TAGTTGAGGA TTCAGCACTA 60  
AA 62

SEQ ID NO:1449

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01603

SEQUENCE DESCRIPTION:

GATCCCCATT CTTTCAAAA ACAAATAAA ACAATAAAGA CTGCAAGGAA GACTGANGGA 60  
AA 62

SEQ ID NO:1450

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01604

SEQUENCE DESCRIPTION:

GATCCAGTCT GGAATAACAT TTTGTAAAAA AAAAATATAT ATATATATAT ATATNGCTGA 60  
AA 62

SEQ ID NO:1451

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01605

SEQUENCE DESCRIPTION:

GATCGGGGGC ACCAGAGGGG CAGAGGCACC AACATCTGAA TAAAGCCATT GTTCTCCCAA 60  
A 61

SEQ ID NO:1452

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01606

SEQUENCE DESCRIPTION:

GATCTTGGAC NTCTCGCATT CAGAACTGTG AGAAATAAAT ATCTATTATT TACAAATTAA 60  
A 61

SEQ ID NO:1453

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01607

SEQUENCE DESCRIPTION:

GATCTCCGTC TTGTATGGCT GAATGTTGGC CTAAAATAAA GATTACTGTT GTAAAATAAA 60

SEQ ID NO:1454

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01608

SEQUENCE DESCRIPTION:

GATCTGTGGA GAATGTACAC AGTTTAAACA CATCAATAAA TACTTTAACT TCCACCGAGA 60

AA 62

SEQ ID NO:1455

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01609

SEQUENCE DESCRIPTION:

GATCAAGAAT CCTGCTCCAC TAAGAATGGT GCTAAAGTAA AACTAGTTTA ATAAGCAAAA 60

AAAAAAACCA AA 72

SEQ ID NO:1456

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01610

SEQUENCE DESCRIPTION:

GATCTAGATG TTTCTTAAAC CAAGATGAAT TAAAATATAG TAGAGTTCCA CTGTNCAAA 59

SEQ ID NO:1457

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01611

SEQUENCE DESCRIPTION:

GATCAAAATTG TACCTTTTAA GAGAAAAGGA CCAAAATAAA AGAAAAATGA ATTATGAACT 60

AAA 63

SEQ ID NO:1458

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01612

SEQUENCE DESCRIPTION:

GATCAGCAGT CTGGATGGN AGGNAACAAA GCTAAATAAA TGTTAGTTTG GTGAGCAAA 59

SEQ ID NO:1459

SEQUENCE LENGTH:65



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01614

SEQUENCE DESCRIPTION:

GATCTCCCTT ATATTCTTAT GATGAGGCTA AATAAAAGTC TAATAAAAAT GTTAAATATG 60  
TGAAA 65

SEQ ID NO:1460

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01615

SEQUENCE DESCRIPTION:

GATCAAAATC AAGTTTAAAG TTTTTTGAC CAGATAAATT TAATGATTTT GGCAAA 56

SEQ ID NO:1461

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01616

SEQUENCE DESCRIPTION:

GATCTTAATT ACTTTCAGAA TATTTTCAAA ATAGATATAT TTNAAAATC CTTACAAA 58

SEQ ID NO:1462

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01617

SEQUENCE DESCRIPTION:

GATCGTTCTT CTCTCCGTAT TGGGGAGTGA GAGGGAGAGA ACGCGGTCTG AGAAA 55

SEQ ID NO:1463

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01618

SEQUENCE DESCRIPTION:

GATCCCTGAG ACGGGGTAAG TTATAATAAA CAGAAATGTA TTGGCTCAGA AGAAA 55

SEQ ID NO:1464

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01619

SEQUENCE DESCRIPTION:

GATCTGTTAT GTATTCAAC ATAATCATGT TTCATAAAGA TTTAGTCTTC TGAAA 55

SEQ ID NO:1465

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01620

SEQUENCE DESCRIPTION:

GATCCACCT TTGCTCCTGA CAACCCTCAT TTCAATAAAG ACCAGTGAAG ACCAAA 56

SEQ ID NO:1466

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01621

SEQUENCE DESCRIPTION:

GATCAGAATC CTGCTCCACT AAGAACGGTG TAAAGTAAAT TAGTTATAAG CAAA 54

SEQ ID NO:1467

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01622

SEQUENCE DESCRIPTION:

GATCTTGAGC CTTAACTGGA CATGAGGGGC ATGAAATAA AGCTGAACTG CAGCCTCCTG 60  
AAA 63

SEQ ID NO:1468

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01623

SEQUENCE DESCRIPTION:

GATCTTTTCT AAATGTTATT ACTTGTAAT AAAGTCTATT TTTCTCCCGT GAAA 54

SEQ ID NO:1469

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01624

SEQUENCE DESCRIPTION:

GATCTGTATA TTTTTTCTA AGAGAAAATG TAAATAAAGG ATTTCTAGAT GAAA 54

SEQ ID NO:1470

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01625  
5 SEQUENCE DESCRIPTION:  
GATCTGCGCA TATATATATA TGTATAAAAA ATAATAAAAT AATGGAAGNT GAAA 54

SEQ ID NO:1471  
10 SEQUENCE LENGTH:54  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01626  
SEQUENCE DESCRIPTION:  
15 GATCCTAAAT NCACGCACCC CGTGGGAGCN CAATAAAGAT TTACTGAATT GAAA 54

SEQ ID NO:1472  
SEQUENCE LENGTH:53  
20 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01627  
SEQUENCE DESCRIPTION:  
25 GATCCGCCAT CTGTAATGTC CTTGGCACAA TAAACCAAA TGTCAGTTTC AAA 53

SEQ ID NO:1473  
SEQUENCE LENGTH:52  
30 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01628  
SEQUENCE DESCRIPTION:  
GATCCCTAGT GATTACAGCC CTGAAGAAAA TTAAATCTGA ATTAATTTTA AA 52

35 SEQ ID NO:1474  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS01629  
SEQUENCE DESCRIPTION:  
GATCCAGTGT GGATTCTTNG AGTAATAACG TTGGTTTTAT TTATCATATA AA 52

45 SEQ ID NO:1475  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01630  
50 SEQUENCE DESCRIPTION:  
GATCTTCAAT GTTTATTTTA AAATAAAATA AAATAAGTTC TTGACTTTTA AA 52

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SEQ ID NO:1476  
 SEQUENCE LENGTH:56  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01632  
 SEQUENCE DESCRIPTION:  
 GATCTTGAAT GAAAGTCTTC TCAGGCTGTA GGGTGGTTCC TACAACCACA GCCAAA 56

SEQ ID NO:1477  
 SEQUENCE LENGTH:51  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01633  
 SEQUENCE DESCRIPTION:  
 GATCTCATCT GAATCCCCAA CACCCAATAA AGTTCCTTTT TAACACACAA A 51

SEQ ID NO:1478  
 SEQUENCE LENGTH:55  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01642  
 SEQUENCE DESCRIPTION:  
 GATCAAAATC CTATTTAGAA AAAATAAAAC TACTTTCTGT TTATCTCTTT AGAAA 55

SEQ ID NO:1479  
 SEQUENCE LENGTH:34  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01671  
 SEQUENCE DESCRIPTION:  
 GATCCAAAAA CATCCGTGAA CCTCTGTCTG TAAA 34

SEQ ID NO:1480  
 SEQUENCE LENGTH:305  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01673  
 SEQUENCE DESCRIPTION:  
 GATCAAAATA AAGGATGATA ATAGATATTA TTTTINCTTA TGACAGAAGC AAATGATGTG 60  
 ATTTATAGAA AAAC TGGGAA ATACAGGTAC CCAAAGAGTA AATCAACATC TGTATACCCC 120  
 CTTCCAGGG GTAAGCACTG TTACCAATTT AGCATATGTC CTGCAGAAT TTTTTTTTCT 180  
 ATATATACAT ATATATTTT AACCAAAATG AATCATTACT CTATGTTGTT TTACTATTTG 240  
 TTTGACATAT CAGTATATCT GAAACACCTT TTCATGTCAA TAAATGTTCT TCTCTAACAT 300  
 TAAA 305

SEQ ID NO:1481

SEQUENCE LENGTH:734

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01686

SEQUENCE DESCRIPTION:

GATCCAGCCC ATTCTCTACT CTTACTCCTT TCATGGGCCA CCAGAGCCAG TACTCTTGGA 60  
TAGCAGCAGC ATTCTAGCTG ACAGAATTTT GCTGATGGAT ACTTTCTTTC AAATTGTCAT 120  
TTATCTTGGT GAGACCATAG CCCAGTGGCG TAAAGCTGGC TACCAGGACA TGCCCGAGTA 180  
TGAAAACCTT AAGCACCTTC TGCAGGCACC ACTGGATGAT GCTCAAGAAA TTCTGCAAGC 240  
ACGCTTCCNG ATGCCACGTT ACATCAACAC GGAGCATGGA GGCAGTCAGG CTCGATTCCCT 300  
TTTGTCCAAA GTGAACCCAT CTCAGACACA CAATAACCTG TATGCTTGGG GACAGGAAAC 360  
TGGAGCACCC ATCCTAACTG ATGATGTTAG CCTGCAGGTG TTCATGGACC ATTTGAANGA 420  
AGCTGGCTGT CTTCCAGTGG CCTGTAAAG CTGAGGATAC AACCAGGGAA ATGCAAACGG 480  
TNTCAAGATT TGGTGGTTCA AAATTGTCTA GAAAGGTTT GATAACCATT CCNGGTTACT 540  
TTTTCTTNGG ANGTTTTAAC CAAATAATCA ANGGCNATTT TATTATGGAA CCTCTTTAGG 600  
TTATAATTNA TTNGGAATNC CGNCNTTGGC CTTTCTTGN CTTTAAATT TTAAGGGAAN 660  
AAANNTTGG GCNTNAGNG GTTNNGGNTT TTTGGNNCNA ACTTTNGGNN TTAATAAANC 720  
NGGGGNNTNT TAAA 734

SEQ ID NO:1482

SEQUENCE LENGTH:731

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01687

SEQUENCE DESCRIPTION:

GATCAACCGG AGCGCTTCCG AGCCATCCTT GCATCGGGCA GCCCACACTG AGGATATCAA 60  
TGCTTGACAG CTGACCACGT CCCCAGGGCT GCCTGTNTTC TAGTTGACTT TGCACCTGTN 120  
TTCAGGCTGC CAGGGGAGGA GGAGAAGCCA GCAGGCACCA CTTTCTGCT CCCTTCTCC 180  
AGAGGCAGAA CACATGTTTT CAGAGAAGCT GCTGCTAAGG ACCTTCTAGA CTGCTCACAG 240  
GGCCTTAAC TCATGTTGCC TTCTTTCTA TCCCTTTGGG CCCTGGGAGA AGGAAGCCAT 300  
TTGCAGTGCT GGTGTGTCCT GCTCCCTCCC CACATTCCCC ATGCTCAAGG CCCAGCCTTC 360  
TGTAAGTGG CAAGTGGGAT GTTGATGGA GTACAAAAG CAGGGGCCA GCCCAGCTGT 420  
TGGCTACATG AGTATTTAGN GGAAGTAAG GTAGCAGGCA GTCCAGCCCT GANNTTGGAG 480  
ACACATGGGG TTTTGGAAA TAAGNTTCTT GNGGGATGAA TGAACAGGN GGGNTTCTT 540  
CANGGAGTGG TNCAGCNCAG ACATTNNAC ATAAGGACCA AACAGCCCAG NNTNCCGNAT 600  
TTTGNCNCCC AAGNGCCTTT TTTGGACTTG GANCTTTNT NGGGGAAAG CNCTTNAANG 660  
TTTAAGNGCC AGNATNGGTG TTTCNGNAAG NATTGCCATC CGATTAGCC TITANGGGAN 720  
GTTCANAAG N 731

SEQ ID NO:1483

SEQUENCE LENGTH:687

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01688

## SEQUENCE DESCRIPTION:

5 GATCGGTGGC TCCATCCTGG CCTCACTGTC CACCTTCCAG CAGATGTGGA TTAGCAAGCA 60  
 GGAGTACGAC GAGTCGGGCC CCTCCATCGT CCACCGCAAA TGCTTCTAAA CGGACTCAGC 120  
 AGATGCGTAN ATTNTGCTGC ATGGGTTAAT TGAGAATAGA AATTTGCCCC TGGCAAATGC 180  
 ACACACCTCA TGCTAGCCTC ACGAAACTGG AATAAGCCTT CGAAAAGAAA TTGTCCTTGA 240  
 AGCTTGTATC TGATATCAGC ACTGGATTGT AGAACTTGTT GCTGATTTN ACTTTGTATT 300  
 10 GAAGTTAACT GTTCCCTTGT GTATTAACGT GTCAGGGCTG AGTGTCTGG GATTTCTCTA 360  
 GAGGCTGGCA AGAACCAGTT GTTTGTCTT GCGGGGTCTT GTCAGGGTTG GAAAAGTCCA 420  
 AGCCGTAGGA CCCAGTTTC CTTTCTTAAG CTGATGTCTT TTGGCCAGAA CACCGTGGGC 480  
 TNGTTAATTG CTTTAAAGTT GGAAGCGGT TTGCAATTAC GGCNCTAAAA NGTATTCATC 540  
 CTNAATTNAA GGAAAGGGTT TTTTGTGAC CGAAANNNG ATTCTTTGAA GNGNTGNCAC 600  
 15 CAAATTTTGG GTTTTCANCC GGTAAGGGGN GACATTAGGN CCCAGNACAA GGNATTNTGA 660  
 AAGGGAANAN AANGGCNCC GAAAAAN 687

SEQ ID NO:1484

SEQUENCE LENGTH:649

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01689

## SEQUENCE DESCRIPTION:

25 GATCAAACTG TATTGCCAG GCCAGCTCCT GAAGAACTGT GAACTATGAA CGTCTCAGCC 60  
 TAGAAGGATA ATGTGACCTT CAATTGACAC ACCATCCATT GTCTCTTTCA AACTAAGAGC 120  
 CTCTCTAAGC TAGATAGGCC AAGGATTATT TTTTAACTT TTATTTTAGG TTCAGGGGTA 180  
 CATATACAGG TTTGTTACAT AGGTAACCTC ATGTCATGAG GGATTTTGTG TAGATTATTT 240  
 30 GGTGACCCAG GACTAAACC TAGTACCCAT TAGTTGTTT TNCTGCTCCT CTCCCTCCTC 300  
 TCACCCTCCA CCCTCAGTTA GTTCCCAGTG TGTGTTGTTT CCCCACATCT ATCCATGTGT 360  
 TCTTATTATT TAAGCTCCCA CTTATAAGTA AGAACATGCA GTGTTTGGTT TTCTGTTCCC 420  
 GATTAGGTAA TGCTGAGGGA TAATGGCTTC CAATTNCCAT CCATNGTTTC TGCAAAGGAN 480  
 CATGNNCTCA TTNCTTTAAA TATGGGCTNG CATAGNNGTT CCATGGGNGG TGAATGTACC 540  
 35 ACATTTTCCT TTNANCCAGG TCTNATCAAT TGGNGGGCCA TTGNGGGTGA TTCCAAGGCT 600  
 TNGGTAATGG TGAANAGGGC ACAATAANCC AGTACCATGG GGCATGAAA 649

SEQ ID NO:1485

SEQUENCE LENGTH:549

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01691

## SEQUENCE DESCRIPTION:

45 GATCCTCTGA TGGGAGCTGA AAGGATGAGA GGTGGGCATC TAGATTTAGG GAGGCTGTTT 60  
 AGGCTTTTGA GGTCCCTTAC CTGAACACAT AGAAACCCTG GAGCTGTGAC TGTGTCCATG 120  
 TGTGTGTGTT TGTCTGTGTG TGTTGCGGGG GATGGGCACC TGCATGAATG TGGTAGAGAA 180  
 AATGGCTCTG CTCAGAGGGA AGATACGCAT AGCAAGGCAG GGACCAGAGG AATCACAGGC 240  
 50 GCCTGGAGAG CAGCCGGGCA ACGNCTCCAG GGACCTGCCG GCTTCCCTCA GTCTCTCAGG 300  
 GGCCAGCAC TCTTCTTTA GGCCCTGTGA GCGTCCCTTG TCAGGATACA TTCTCTCATT 360

5  
TTGCTGAAGC TGATTTGATT GGGTGTCTGT TTCTCGCAGC CAAAAGAGCT CTGAAATGAG 420  
GAAAGTGCTT CTGTGCTAAC TCCCCGGGTC TCCTGAATTT CAGTCATTCA TGTACCCGCC 480  
TCGAAATTTT TTGCAATATC TGTGTACCCA ATGTCCATTT AATTAATAAA GAAGTTTTCT 540  
TAAATTAAA 549

10  
SEQ ID NO:1486  
SEQUENCE LENGTH:543  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01692  
SEQUENCE DESCRIPTION:

15  
GATCGANGTT TACCTTGTGT CAGGAAAAAA TGTGGGGTAT GCCAAGTATG CCGATAGAAT 60  
AAGTNCTAAT GATGCCACTN GCCACTCTAC ATNGAAAGAT TCTGAATGGG GTGAGACTTA 120  
AAGTTATGCT GGCAGATTCT CCAAGAGAAG AATCTAACAA ACGGCAAAGA ACTTACTGAT 180  
TCTTGAGAAC ACCCGACTAA ATAATGACAT ANTCTCAGC TGA CTGACTG AAAATGTGAC 240  
TGGACGCATT CCTGTGGAC AGTTGACAGC TTTTTTTTTT TCCATATACC TGNTAGTCTG 300  
20  
TGTCCAGCAT TGTTTTGTCT GGGGAAGCAGG GTTGCTGNC ATGTATTTN NATTCATAC 360  
ATTANTGCTA AACCGNTTAT AGTAGTTGTN CCTAGNGCA NTATGTTGTT ACGTGTAGCA 420  
GAANTAAAGT TTTCTTTGCT TTANCTAAAT CATGNCTTTA TTTNTGNAA GGGCAGGACC 480  
GGGAAATTTT ATTNNGNCAGT CTTTGGNTTT TGCCTAATGN CATTGNCATG NNTTTGGGGT 540  
NCN 543

25  
SEQ ID NO:1487  
SEQUENCE LENGTH:533  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01693  
SEQUENCE DESCRIPTION:

30  
GATCCAGAGT TGCATACAGA CCAATTCTG CATCAGTGTT ATCTCGACCA GAGGCTAGTA 60  
GGACTGGAGA GGGCTCTACG GTATTTAATG GGGCCCAGAA TGGTGTGTCT CAGCTAATCC 120  
35  
AAAGGGAGTT TCAGACCAGT GCAATCAGCA GAGACATTGA TACTGCTGCC AAATTTATTG 180  
GTGCAGGTGC TGCAACAGTA GGAGTGGCTG GTTCTGGTGC TGGTATTGGA ACAGTCTTTG 240  
GCAGCCTTAT CATTGGTTAT GCCAGAAACC CTTGCTGAA GCAGCAGCTG TTCTCATATG 300  
CTATCCTGGG ATTTGCCTTG TCTGAAGCTA TGGGTCTCTN TTGTTTGATG GTTGCTTTCT 360  
40  
TGATTTTNTT TGCCATGTAA CAAATACTG CTTGACATGT TGGCATNCAT ATTAATTACG 420  
GATGNAATCC TGGGNANCTA CCTGTNCTC CGAAAACCTG TAGGTANTTG GGGGTCANGG 480  
GGAATTGNNC GGTAATTCCC AAAGCCATTT NATTAAGGN GGAACCTTT AAA 533

45  
SEQ ID NO:1488  
SEQUENCE LENGTH:531  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01694  
SEQUENCE DESCRIPTION:

50  
GATCCAAAAG ANCTGCTTTC TGAAGCAAGT TTCCAAGANG CTCTTCAGGA AAGCATTCTT 60

5  
10  
GACATTCAAG CGCACGAGTG GGTGCCGCTG TGGCTACTGC GGTATTCGGT CATTGTGAAA 120  
AGTAGAGGAA TTATCAAATC AAAAGGCTAC ATTTTACAAG CTAAGAAG GGGTTCCTAA 180  
CTGACTTAGG AGCATAACTT ACCTGTAATT TCCTTCAATA TGAGAGAAAA TTGAGATGTG 240  
TAAAANTCTA GTTACTGCCT GTAAATGGTG TCATTGAGGC AGATATTCTT TCGTCATATT 300  
TGACAGTATG TTGTCTGTCA AGTTTAAAT ACTTATCTNG CCTCCATATC AATCCATTCT 360  
CATGAACCTC TGTATTGCTT TCCTTAAACT ATTGNTTTC TAATTGANAT TGTCTATANG 420  
GANATNCTTG CAATATATTT NNNCNTTANT TTTTATGNCT AATATNAATN CAGGNNAATT 480  
TGTGTTTGG TATTTTGGG CNNGGGITCC GGGGAATGNT TNTNCANNTT N 531

SEQ ID NO:1489

SEQUENCE LENGTH:526

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01695

SEQUENCE DESCRIPTION:

20  
25  
GATCGGCGTG ACCANCCCTT GCCGGAGGTG GCCCATGTCA AGCACCTGTN TGCCAGCCAG 60  
AAGGCACTGA NAGGAGAAGG AGAAGGCCTC CTGGAGCAGC CTCTCCATGG ATGAGAAAGT 120  
CGAGTTGTAT CGCATTAAGT TCAAGGAGAG CTTTGCTGAG ATGAACAGGG GCTCGAACGA 180  
GTGGAAGACG GTTGTGGGCG GTGCCATGTT CTTTCATCGGT TTCACCGCGC TCGTTATCAT 240  
GTGGCAGAAG CACTATGTGT ACGGCCCTT CCCGCAAAGC TTTGACAAAG AGTGGGTGGC 300  
CAAGCAGACC AAGAGGATGC TGGACATGAA GGTGAACCCC ATCCAGGGCT TAGCCTCCAA 360  
GTGGGACTAC GAAAAGAAGC AGTGAAGAA GTGAGAGATG CTTGGCCTNC GGCTTCAACT 420  
TGCGGCTGGC TCTTTCACCG CCATGCAAAC TCCATGCCTA TTTACTNGGA AACCTGTTAT 480  
NCCAAACAGT TGTNCNCTGC TAATAAATTG NCCAGTTTAC CTGAAA 526

SEQ ID NO:1490

SEQUENCE LENGTH:525

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01696

SEQUENCE DESCRIPTION:

35  
40  
45  
GATCAGCAGA GGNATCAAAC CAACACCTTC TTTGGCTCCC CTCCCGCAGC CACAGAGGCA 60  
ACCCACGTTG TCAGCACCAT CCTGAGTCA TTACAATAGC ACCCTGCAGC TATGCTGGAA 120  
AACTGAGCGT GGGACCCTGC CAGACTGAAG AGCAGGTGAG CAAAATGCTG CTTTCTGCCT 180  
TGGTGGCAGG CAGAGAACTG TCTCGTACTA GAATTCAAGG AGAAAAGAAG AAGAAATAAA 240  
AGAAGCTGCT CCATTTTCA TCATCTACCC ATCTATTGG AAAGCACTGG AATTCAGATG 300  
CAAGAGAACA ATGTTTCTT AGTGGCAAAT GTAGCCCTGC ATCCTCCAGT GTTACCTGGT 360  
GTAGATTTT TTTTCTGTAC CTTCTAAAC CTCTCTCCC TCTGTGATGG TTTTGTGTTT 420  
AAACAGTCAT CTNCTTTAA ATAATATCCA CCTNCTCTT TTGCCATTTC ACTTATTGGN 480  
TCCATAANGT GAATTTTAA TTAAGGTTAT GCCACACATG CATGN 525

SEQ ID NO:1491

SEQUENCE LENGTH:522

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear



CLONE:HUMGS01697

SEQUENCE DESCRIPTION:

5 GATCAGCTGT TTGTCATAGG GCAGTTGGAA ACGGCCTCCT AGGGAAAAGT TCATAGGGTC 60  
 TCTTCAGGTT CTTAGTGTC CTTACCTAGA TTTACAGCCT CACTTGAATG TGTCACACT 120  
 CACAGTCTCT TTAATCTTCA GTTTTATCTT TAATCTCCTC TTTTATCTTG GACTGACATT 180  
 TAGCGTAGTA AGGTGAAAAG GTCATAGCTG AGATTCCCTG TTCGGGTGTT ACGCACACGT 240  
 10 ACTTAAATGA AAGCATGTGG CATGTTTCATC GTATAACACA ATATGAATAC AGGGCATGCA 300  
 TTTTGCAGCA GTGAGTCTCT TCAGAAAACC CTTTCTACA GTTAGGGTTG AGTTACTTCC 360  
 TATCAAGCCA GTACGTGCTA ACAGGCTCAA TATTCCTGAA TGAAATATCA GNCTAGTNGN 420  
 CAAGCTCCTG GTCTTGAGAT GTCTTCTCGT TAAGGAGATG GGCCTTTTGG GGGTAAAGGN 480  
 TAAATGGAT GAGGTCTGNC ATGNTTCACT ATTCTAGGAC TN 522

SEQ ID NO:1492

SEQUENCE LENGTH:509

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01698

SEQUENCE DESCRIPTION:

20 GATCCCAACA ATATTCCAA GGCCTCAATG ACAAGTGGTT TGGTTCAGCA GTTCCAACAC 60  
 ACAGTCCTTC CCTCAGTGAC TCCCTTGGNN CCCTCATCTG CACACTGATT GCCATATTGC 120  
 25 CCTCTATTTT CTGTCTTTGG TTTAAACCCC AAGGGCCCAG AGGCTTTCTC CGATGTCTAA 180  
 CTCTTTGTGC CTTGAGCTCC TTTATGTTTG GGTGGCATGT TCATGAAAAA GCCATACTTC 240  
 TAGCAATTCT CCAATGAGC CTTTGTCTG TGGGAAAAGC AGGAGACGCT TCGATTTTTC 300  
 TGATTCTGAC CACAACAGGA CATTATTCCC TCTTCTCTCT GCTCTTCACT GCACCAGAAC 360  
 TTCCCATTA AATCTTACTC ATGTTACTAT TCACCATATA TAGTATTTCG TCACTGAAGG 420  
 30 ACTTTATTCA GAAAAGGAAA AACCTCTTTT TTAATTGGGA TGGGAACTTT CTANCCTGCT 480  
 TTGGNCNGGG GGCCTCTGGG AAGGNCTTN 509

SEQ ID NO:1493

SEQUENCE LENGTH:497

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01699

SEQUENCE DESCRIPTION:

40 GATCCTGTCA AAATAGTCCG ATGCCATGAA CATATAGAAT CCTTACAGTA AATGGAGAAT 60  
 TACTCTTTTT TAGACAAAGA GAAGGGCCTT TTTATCCAAC CCTAAGATTA CTTACACAAAT 120  
 ATCCTTTTAT CCTGCCACAC CAGCAGGTTG ATAAAGGAGC CATCAAAATT GTACTCAGTG 180  
 GAGCAAATAT CATGTGTCCA GGCTTAACTT CTCCTGGAGC TAAGCTTTAC CCTGCTGCAG 240  
 45 TAGATACCAT TGTGCTATC ATGGCAGAAG GAAAACAGCC TGCTCTATGT GTTGGAGTCA 300  
 TGAGATGTCT GCAGAGNCAT TGNAAAGTCA CCAAAGGATT GGCATTGAAA ATATCCATTA 360  
 TTAAATGAT GGGCTGTGGN TATGAGGCAT ATAAATGNGC TCAGAGGGAT GCACTTGGGT 420  
 NAATATGGNT ATTGTGCTGT ATCTGTGTTG TGNCTGTGTG TGCANCTGAG GTATGCCTGT 480  
 50 GGTNTGCTGA TAAATCN 497

SEQ ID NO:1494

SEQUENCE LENGTH:472

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01700

SEQUENCE DESCRIPTION:

GATCAAAATA TCATGGATTG AACCTCATCA ATTGATAGCA GTGAGTGACT GANGCTTCCA 60  
AATCAAGAAA AGCCGGCACC AAGAAGCTTC ATTCTAATCT AGAGCTGACC AGTTTGAGCT 120  
GATTCTNTCT TTGAAGAGTC CTTCTTGATT GCAGTGCAGT ACTGGCATT CTGAATGGAT 180  
GTANGNGGAG TATTTTAGTC TAAAGGCTTT TCAAATTACT TGAATTTTTT TAAAAATTGA 240  
GGAGCTTTAT TTCTATTAC CTTTCCATT TTGTATATCA AATTTCATN GTCATTAAAA 300  
ACTGTATCTT GAAACTTTGT GAACTGACTT GCTGTATTTG CACTTTGAGC TCTTGAAATA 360  
ANTGTGATTT TNGTGTGATT ATCTGGTTTC CNGTTTTAAC CATTACCTGT CACCNTTNAT 420  
CCTTAACCTT GAAAGTCCAG AAACCATNNN ATTATTAAGG TNGTCCAATA AA 472

SEQ ID NO:1495

SEQUENCE LENGTH:496

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01701

SEQUENCE DESCRIPTION:

GATCTGTGTG GATGGCAAAC TCCCCAGGCC ATTCTGGGAC CTAAGTTTAA GAAGTGCCGT 60  
CCTCGAACTT NCTGACTCTA AGCTCCTGAG CGGGAGTNAG ACTTAGCCCT GAGCCTGCAC 120  
TTCCTGTTCA GGTGCAGACA CTGAACAGGG TCTCAACAC CTTACAGCATG TNTNTTGTGT 180  
GCTCACGTGC CACACAGTGT CTCATGCACA CAACCCAGTG TACACACCAC CTACATGCAC 240  
ACAGCGTCCT TNCACACTGT GTATGTGAAC AGCTTGGGCC CTGCAACACA ACCATCTACA 300  
CACATCTACA ACCNNAGGA CACACACATG GGTCCGTGCC ATGTCACCTC CNTAGGGGAN 360  
GGNTTTCTTT CCAAGGTGTN GCCAGGCCAG GCAAGCCTTC CAGGCCATGA ATTCCTTACT 420  
TAGGTACCTN GGGGTTTGGG GTGGGNGNCC CAGNCAAAAT TCTNGGGTTN CGTNCNCTTT 480  
GGTTNNGNCC AGNTTN 496

SEQ ID NO:1496

SEQUENCE LENGTH:492

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01702

SEQUENCE DESCRIPTION:

GATCCTGTAC AGCCAGTGTG GGGATGTGAT GAGGGCCCTG GGCCAGAACC CTACCAACGC 60  
CGAGGTGCTC AAGGTCTTGG GGAACCCCAA GAGTGATGAG ATGAATGTNA AGGTGCTGGA 120  
CTTTGAGCAC TTTCTGCCCA TGCTGCAGAC AGTGGCCAAG AACAAGGACC AGGGCACCTA 180  
TGAGGATTAT GTCGAAGGAC TTCGGGTGTT TGACAAGGAA GGAATGGCA CCGTCATGGG 240  
TGCTGAAATC CGGCATGTTT TTGTCACACT GGGTGAGAAG ATGACAGAGG AAGAAGTAGA 300  
GATGCTGGTG GCAGGGCATG AGGACAGCAA TGGTTTGTAT CAACTATGAA GAGCTCGTCC 360  
GNATGGGTGC TGAATGGCTG ANGGACCTTT CCCAGTNTTC CCCAGATTNC CGTTGCCTTT 420  
CCNTNGTGTG AATTTTGGTN ATCTAAGCCT AAAAGTTTTC CCTAAGGCTT TCTTGTCTTC 480  
AAGCAACTTT CN 492

SEQ ID NO:1497

SEQUENCE LENGTH:490

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01703

SEQUENCE DESCRIPTION:

GATCCAAATA CACAGAATCA AGGGAAGGAG TTGCTTCTTC TAAGAGTGAT GCTTAATCTT 60  
 TTGGGTCATG GATGAATTGA AGATTGATT AAAGTTACAA TAAAAAGAGN CCCNTCAAA 120  
 GCACGTACAN NCTGTATCAC GAACGGTGCC TGGCCTACTT TTTCCTTTTC TACCCACCCC 180  
 ACCCCAACCC CCCCTGTCTC AGTGAAAACC TGGTTGTTAC TAAAGTGAAA CTTTAATAAG 240  
 GATATTGCCT AGGGAAGATT AGTTGTTTTT CTTGTCATT C AAGTTCATT TGGACCTCTT 300  
 CCTCTGAGCT GTTAATCAGT GTTGCTAAAC AGACAGGGAA AGACAAGGGA GAGAAAAATG 360  
 CTGATTCATT CTTCAGAACT TTAACCNNT TTAACCNCTA ATTCTTCTCC TTGAGAAGCT 420  
 ATTCTTTGAT TGTGAAAGCT TTGTTGTTCA GGGNAATATG GGGTAATAAA AATAGCTAAC 480  
 CATTTTTAAA 490

SEQ ID NO:1498

SEQUENCE LENGTH:477

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01704

SEQUENCE DESCRIPTION:

GATCAAACTT CCATATTGTC CTTGGGAATA ATGGACAAAG GGAAATACTC TTAATTCATG 60  
 AATAAAAACT TTGCAGAAAA TTAGACAGTG TTTAATTTTC GAAAACTTCC CTCTCTAGAC 120  
 AGTAGATACC ACCTACTGAT GGTACATAT ACTAGGGAAA TTTTAAAAAT AGGAAATGCT 180  
 GATAGCTCAT ATTATAAAT TCTAAATCCT AGGAAGAAAAC GCTTGGAGTG CTCTGAATA 240  
 TACAGAAGTT CCATTAAAGG GCAAGTTTCC CCGTAGATGT ATCAAAATAC TACCAACTGT 300  
 AAATGAGGT TTAATCCCA AATGTATTCT ACTTGTCTA AAACAATCTG TCCNCAAATA 360  
 TANAATAATA AAGTAATAAA TTGTTATTTT CCGCACCAAT GGGGNATCTC TAATGGTGGA 420  
 AAATGGTAAT CCTATGGAAT ATTAATTTTT TTAAANTAAA ANGGTNATTT TAATAAA 477

SEQ ID NO:1499

SEQUENCE LENGTH:476

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01705

SEQUENCE DESCRIPTION:

GATCCCCGAG TCTTCACAAA TNCTCACTGA AGAAAAATTC TGAACAATT CAGGGTCCTT 60  
 TCATAACCTC TACTCTGAGG TGTTANTAAA AAACCTTAGT AACTTAAAAA AAATGAGCTG 120  
 TACACAAATA CTGAACAATA ATGCTNCNTA TGTTAAGTAT GTANGAAAAA TATATACTTT 180  
 GACATANATA AGAAACGGTG AGTTGATAAT TGGATAGAAT GGTGGATAGA GTGATAGATA 240  
 TGTAGTAAAG CAAATATAAC AAAATGATAA TTGTACAATC TAAGTGGTTG GACTATAAAT 300  
 ATGCACTTCC CACAACNTT TTATATGNTT AAACAGTTTT ATAATACCAT ATTANGGGAA 360  
 ACTGTTTGTC TCAAGGAAAT AGAGNTTGTG ATATGTTCTA GTNCAATGNA GGTGTAATCA 420

TGGTNAAATT AAAAGCTTTT ACTTCCTGGG CAATTAAAGG TAATCCTGGT AGGAAA 476

SEQ ID NO:1500

SEQUENCE LENGTH:488

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01706

SEQUENCE DESCRIPTION:

GATCCTGACT GCTGTCATGG CGTGCCCTCT GGAGAAGGCN CTGGATGTGA TGGTGTCCAC 60  
 CTTCNANAAG TACTCGGGCA AAGAGGGTGA CAAGTTCAAG NTCACAAGT CAGAACTAAA 120  
 GGAGCTGCTG ACCCGGGAGC TGCCAGCTT CTTGGGGAAA AGGACAGATG AAGCTGCTTT 180  
 CCAGAACTG ATGAGCAACT TGGACAGCAA CAGGGACAAC GAGGTGGACT TCCAAGAGTA 240  
 CTGTGTCTTC CTGTCTGCA TCGCCATGNG GTNTAACGAA TTCTTTGAAG GCTTCCAGTA 300  
 TAAGCAGCCC AGGANGGAAA TGAAAACCTC TCTGATGTGG TTTNGGGGGG TCTGCCAGCT 360  
 GGGGGCCCTT CTGNGTNGNC CANTGGGGNA CTTTTTTTTT TTTTCCACC NTGGGNTCCT 420  
 TTNANGANAA NGGGCTTNGA TTGCTTGAGC AAAGTTTCAA ATAAAAGNTT TNTNGGGAAG 480  
 NTTTTAAA 488

SEQ ID NO:1501

SEQUENCE LENGTH:472

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01707

SEQUENCE DESCRIPTION:

GATCCAGAAG CTGATGGATG TGGGTCTGAT TGCAATTCGG TGATGACTTG TTCATACCCC 60  
 CTTCCCTTCG CCCTCATGTG GAAAGAGGAG CTGGGACCGC GCGGAGCAGC ACGGAGCGGA 120  
 AGGGAGAGCA GGGGAGAGAA GGCCTCATNT CTCTATATT ATACATAACC CCGGGGAAGA 180  
 CACAGAGACT CGTACCTGCG CTGTTTGTCG CGCCGCTGCC TCTGGGCCCT CCCAGCACAC 240  
 GCATGGTCTC TTCACCGCTG CCCTCGAGTT CCATGTCTCT TTCCCCTGCC CCTAGTTGCT 300  
 GTCTCGGCTG CTCTCCATA GTTGGTTTTT TTTTINATTT GGGGCAGTGG GCATGTTAAT 360  
 GGGGGAGGGG AGGGGGTTCT TCCAGCCTNA GGTCCCAGTT GGTCTNACGT NGTTTAATTC 420  
 TTGGGTCCCC TTTTCCAAT TAAAACAAGC CANTNGGGGC GTGGGTTNTA AA 472

SEQ ID NO:1502

SEQUENCE LENGTH:469

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01708

SEQUENCE DESCRIPTION:

GATCGCAAAT TGCTNGAGCT GTTGTGGAAT AAATACTGGG TGAATACGTT GAGTTCTTCT 60  
 AGCTTGCTTA CTAATGCAGA CTATACCACT GGTGAGGTCT TTGATTGTC TGAAGGTTA 120  
 GAGCAGTCAG AAGCCCAGCT GGGACGAGGG AGTTTCATGT TGGGTTTAGA AACGCATGAC 180  
 CGAAAATCAG AAGACAAACT TGCCAAAGCT ACAAGAGACA GCTGTAAAAC TACCATAGAA 240  
 GCTATCCATG GATTGATGTC TCAGGTAAAT TAAGGATAAA CTGTTTAATC AAATTAACAT 300  
 CTCTCCACA GTCTCTGAGA AGGGCTNTAC CTGAAAGACA GTATGNGGGA AAATATTCAT 360

GGTAACACTT TTAANCCAG TTNCCNAAAA TCTGATTAGG ANGNTANGG TTCTCTGAAG 420  
 TGGTCTCTAA TATTANTATC CCTGTAATAA ANGTCCTTA AANTGGAAA 469

SEQ ID NO:1503  
 SEQUENCE LENGTH:466  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01709

## SEQUENCE DESCRIPTION:

GATCTGCAGT GGCTGTTTGA CCAGACCACA AAGTTCACAT CTCCTGAGCT TAGTGTCGGT 60  
 GGCTGTCCAC CTCCAGCCA TACTTGACTG TCCCAAACCT CTCCTGCAG CCACATGTTT 120  
 CCCATGACCT GTGGGCTCTG CAGATGGACC TCTCTCCGCT AGAGATGCCC TTCTCCCAA 180  
 TGGCTTCCCT CCTGGAAGGC CCAGCCTGAG TCCTCGTCTC CTTCCAGTG CTTCTGCCAG 240  
 AAGCATCCCC ATGATGTTGT GACCGCACAG CACTTTGTGT CTTGCTTTGA GCACTTGCCA 300  
 CTCTGGCTGG TGCTGTGCC ACTGATTGTG TACTGTCTTG CTGCCCTTC TAGACTGTGA 360  
 GCTCCTCGTG GGCAGGACC GCCTGTGTTT TCTGTATTC CCACGGAGCC TAAGNACAGT 420  
 GCCTTGCACT TGATAAGGTG CTTAATAAAT GTCTGNTCAA CTGAAA 466

SEQ ID NO:1504  
 SEQUENCE LENGTH:465  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01710

## SEQUENCE DESCRIPTION:

GATCACTGTG TTCAGTGTG TTGGAATGGA TTCAGACTGG CTAATGGGGG AAAGGGGAAA 60  
 CCAGAAGGGC AAGGTGCCAA TTACCTACTT AGAAGTCTC AATTAAGTAG GTGGACTATG 120  
 GAAAGGTTGC CCATCATGAC TTTGTATTTA TATACAATA ACTCTAAATA AAGCAGGTTA 180  
 AGTATCTTCC ATGTTAATGT GTTAAGAGAC TGAATAACC AGCCATCAGA AACTGGCCTT 240  
 TCTGCCAATA AAGTTGCATG GTAAATATTT CATTACAGAA TTTATGTTAG AGCTTTCATG 300  
 CCAAGAATGT TTTCTTACAA AATTCTCTTT TTATTGAGGT TTCACTAATA AGCAGCTTCT 360  
 ACTTTTGAGC CTCAACTTAA AGCAGANCTG TTTTCTACTG GGATTTTTC TTAACAGCAA 420  
 GCCTTTTCTT TTTATGTAAA ATTAAATCTA TTGTGGAATT TGAAA 465

SEQ ID NO:1505  
 SEQUENCE LENGTH:462  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01711

## SEQUENCE DESCRIPTION:

GATCTTGTCT TAAAACATG ATAGTCCTTT CAGTATAATG TCTTAGATTA AAGACGTTGC 60  
 CTTTAATATC TGTGGGAAG GAAATGTCCA GACTTTTCAA ATCTCTTATT ATATGTTTCC 120  
 TTTTNTTGT TACATAGGGA ACAATGTTTA TAGTCGTGTG TACAGTGGGG GTCTACANCN 180  
 NGAAGTGAT ATTTTCAAAC AATTTTTTAA NGATTTAACA ATTTTGTAA ATCATTITCA 240  
 GGCTTCTGCA GCTGTAGATT CTCAGTGTA ATCCCTTGCT TGCTCATGCA TAAGTGTATT 300  
 TGCAATACCA NATATACAGG TTAGTATTT TTGCCTGTTA GTNGATTGTT TCACATGNGT 360

AACGTNTTGG GTGAGATGTT ANATGGTTGG NCGAGGTACT GTGGANGTGA ATGTGGGNAG 420  
 TAATTTTAAAN NCATATGNAA TTGGTCACCA GGGCCNAATT TN 462

SEQ ID NO:1506

SEQUENCE LENGTH:459

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01713

SEQUENCE DESCRIPTION:

GATCCCAAGC AGGCTCACAA ATTTAAATGA GGGCTTTGTG TGCAGAAAGA GGAATAAGTA 60  
 CAGATTATTT TCCTACCACT AGATTTTGG GGAGAGTCAC CATGGAATGT TGACAATTAC 120  
 TTAATAATTT TTAAGCTCCC TTGCTGAATT CCTGTCCTGT CCCTGAGGAA TCAGATGGTC 180  
 ATACAGCCAT AGGCACCCAC CCGAAATTTT CCTAGGAGTT GGAGTAATGC TAGAATTGAA 240  
 GACCTTCTGA GTAAAGGGCT TCTCTGCCTT CTCAGAGGCA GGAGAATTG CACTGGTTGT 300  
 GTTAAATGTA TAAAAAGCTA TATGTTACAC AGTTTACTCA TTTCCAATGT GTAGATGAAT 360  
 AAAATGTAGT GTACAAATTA TTTGAAAATC CCAGAAGGGA AGGTACTTTT CAAANACAGT 420  
 ATTTTTTTTA ACAAATAAAC TTACGNTTTT TACAGCAAA 459

SEQ ID NO:1507

SEQUENCE LENGTH:454

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01714

SEQUENCE DESCRIPTION:

GATCTCCTGT CCATCAGCCA GGACAGTCAG CTCTCTCCTT TNAGGGCCAA TCCCCAGCCC 60  
 TTTTNTNGAG CCAGGCCTCT CTCACCTCTC CTACTCACTT AAAGCCCGCC TGACAGAAAC 120  
 CACGGCCACA TTTGGTTCTA AGAAACCCTC TGTCAATCGC TCCCACATTC TGATGAGCAA 180  
 CCGCTTCCCT ATTTATTNAT TTATTTGTTT GTTTGTTTTA TTCATTGGTC TAATTTATTC 240  
 AAAGGGGGCA AGAAGTAGCA GTGCTGTGTA AAGAGCCTAG TTTTAAATAG CTATGGAATC 300  
 AATTCAATTT GGACTGGTGT GCTCTCTTTA AATCAAGTCC TTTANTTAAC ACTGAAAATA 360  
 TATAAGCTCA GATTATTTTA ANTGGGNATA TTTATAANTG NGCAAATATC ATACTGTTCA 420  
 NTGGGTTCTG GAATAAACTT CACTGGAGGG NAAA 454

SEQ ID NO:1508

SEQUENCE LENGTH:453

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01715

SEQUENCE DESCRIPTION:

GATCGAGCAG TGTGACTACC CCCCACTCCC CGGGGAGCAC TACTCCGAGA AGTTACGAGA 60  
 ACTGGTCAGC ATGTGCATCT GCCCTGACCC CCACCAGAGA CCTGACATCG GATACGTGCA 120  
 CCAGGTGGCC AAGCAGATGC ACATNTGGAT GTCCAGCACC TGAGCGTGGA TGCACCGTGC 180  
 CTTATCAAAG CCAGCACCAC TTTGCCTTAC TTGAGTCGTC TTCTCTTCGA GTGGCCACCT 240  
 GGTAGCCTAG AACAGCTAAG ACCACAGGGT TCAGCAGGTT CCCCCAAAGG CTGCCACGNC 300  
 TTACAGCAGA TGCTGAAGGA GAGCAGCTGA GGGAGGNGGN GCTGGCCACA TGTCAGTGN 360

GGGTCAGNTT CCAAAGTCCT TTNNTTANCA CTGTTGTGGA CAATNTNANN TNGGGTCAAN 420  
TNAAGGGCAG GTNGGTTNAA GNGGNGCCNN GGN 453

SEQ ID NO:1509

SEQUENCE LENGTH:450

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01718

SEQUENCE DESCRIPTION:

GATCCTGGGG AAGGTGGGGA ACATGCTTGC AGTATCTNTC CCTGTNTGTN TGCTCACATA 60  
AGCATTCGGT CCATCTGAGC TCATCGTGCT ACTGGTATGT GTATGTNCAG TTACACAGTT 120  
TTNTGTATCA TAGATTCTAG TGTGTTTATA CAAGGNGACA TCTGTGGTTT CCCCACCCT 180  
TCCAAAAGGC TATTCAAAG GAACCAAGCCA ACGTATGAGA AATGANTGTA ACGTGTGGA 240  
CATTGACTTC CCGCATAAGG CAGGGTGACC CCCTGAACTC CAGATGTNTG CACAGTATCT 300  
NATGTGTTGT TTTCCGTTGT GACGAATGTG NATTGAACA TTTGGGGGAG CCCCAGAGG 360  
GATTNTNAG TGGGAAGCAT TACACTTTGC TAAATCANGT ATTTNNTTCC TGNTTAAACC 420  
AACCTANTTA ANTNTTANC CCTTGGCAAA 450

SEQ ID NO:1510

SEQUENCE LENGTH:449

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01719

SEQUENCE DESCRIPTION:

GATCCATGGA TGTAGTGGGG AGTGAAAAAT GGCACAATAT CAAGTGTGAG ANAGGNGATA 60  
NACTTCGACT CTNCTGCCTT CAACTGAGAN CAGTTGACCG CAAGCTGAAA CTGGTGTGTG 120  
GNAGTCACAG CTTTCATCAAG GTCATCAAGG CCAAGAAAAA CAAGGAAGGA CCAATGAATG 180  
TTAATTGAAA TATGAAAGCT GAAATGCAAC AAACAACCTC CGCTTAAAC AATTAAGTTG 240  
TTAATAACTG TGATTTTGT AATTTAGTA ATTCATTAA ATGATGTTT AGTAGATATA 300  
TTCTAGCATA TTANGAGCTT TTATACTGA GTTATAGATT AGTTTGCTTT CTGGAATAAA 360  
ATTTTCTTCT TATACTCTTC CTTTTTTTGA GATATNACAT TTTGCTTTTA TGNCATTAC 420  
GGGGGCAAAA ANTAAAAATAT CTTTTTTN 449

SEQ ID NO:1511

SEQUENCE LENGTH:464

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01720

SEQUENCE DESCRIPTION:

GATCAGAATC ATGGTCTCCC GCAGTGAAGT GGACATGTTG AAAATNAGGT CTGAATTCAA 60  
GAGAAAGTAC GGCAAGTCCC TGTACTATTA TATCCAGCAA GACACTAAGG GCGACTACCA 120  
GAAAGCGCTG CTGTACCTGT GTGGTGGAGA TGAAGTGAAG CCGACACGGC CTGAGCGTCC 180  
AGAAATGGTG CTCACCATGC TTCCAGCTAA CAGGTCTAGA AAACCAAGCTT GCGAATAACA 240  
GTCCCGTGG CCATCCCTGT NAGGGTGACG TTAGCATTAC CCCCACCTC ATTTAGTTG 300  
CCTAAGCATT NCCTGGCCTT CCTGTCTAGT CTCTCCTGTA AGCCAAAGAA ATGANCATTN 360

CAAGGGAGTT TGGAAGTNAA GTCTATGANT GTGAAACAAC TTTTNNCCTC CTGTNGTNCT 420  
GTGTAAATAA ANCAGGTGNA TTAAACTGGN TTTNGTACTT TAAA 464

SEQ ID NO:1512  
SEQUENCE LENGTH:445  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01721

## SEQUENCE DESCRIPTION:

GATCTTGCCA TGGAAAGATAC TAGCCAGCC TAGCAGAAAA GTGCAATATG TATAGCATAC 60  
TTTGACATTT TAAACATGAT AGTCCATAAC CATTTTGAAA TGCTGGGCAA ACTACATGAA 120  
GTTATTATA ATTAATTCAC AGCTAATCAG GCATTTTGAA AGCTTAATTG GATTCAAAAA 180  
CCATAATGTT GGAATTTGGT AAAATTTTAA TGTGATTTT TACTGTGAAA AGGTTTTTAT 240  
AAGATATACA CACCCTAGTT TAATGTTGTG TCTTGGTGTG GATTACAGA TTTACTACAG 300  
GTATTCTGAA CCAGGAACAC ANTCAGGTTT TCAGGCCAGT TTGAATACTG GCTGGCCTTA 360  
AATTCTAATT ATNNGGAGTA GGGACATCAT ACCTAAATNT TTATGTCAGT GGGGNCTGTA 420  
CTTGTCTGTG GGANCTTAGC AAATN 445

SEQ ID NO:1513  
SEQUENCE LENGTH:435  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01722

## SEQUENCE DESCRIPTION:

GATCAATCGG ATTGAGAAGA ACATCCTGAG CTCAGCGGAC TACGTGGAAC GTGGGCAGGA 60  
GCACGTCAAG ACGGCCCTGG AGAACAGAA GAAGGCGAGG AAGAAGAAAG TCTTGATTGC 120  
CATCTGTGTG TCCATACCG TCGTCCTCCT AGCAGTCATC ATTGGCGTCA CAGTGGTTGG 180  
ATAATGTCGC ACATTGTTGG CACTAGGAGC ACCAGGAACC CAGGGCCTGG CCTTCTCTCC 240  
CAGCAGCCTG GGGGCAGGGC AGAGCCTCCA GTCGGACCCC TTCCTCACAC TGGCCCCTAT 300  
GCAGANGGTN AGACAGTTCT TCTGGGGTTG GNAGCTGCTC ATTCATGATG GCCTNCTCCT 360  
TNAGGCCTCA ATGCCTGGGG GGANGGCTGC ACTGTCCTAT TTGGNCGGGA CANACGGTTT 420  
TNTAAAAATT TAAA 435

SEQ ID NO:1514  
SEQUENCE LENGTH:434  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01724

## SEQUENCE DESCRIPTION:

GATCTAACCT AGACTAAAAT TGGGAACCTA TTGCAATTT TTGACCCNGN CCACTAACTA 60  
GTGATTCTNC TCCAAAATTG AGAAAGACAG CACCCATTGA AGCAGATATG TGTGTGAAAG 120  
TATATTTTTC AATTCCAGAT TTTTAATTTT AAGGCTCCAG GAAAGAAAGG AGAGTAGAAC 180  
ATTTTTCCTC ATTTTATCAA ATCCTCTCTT GCCCTCCCTC AATTCCTCTG TAACATTCCT 240  
GAAGCTGTTC CCACTCCCAG ATGGTTTTAT CAATAGCCTA GAGGTAAAGA ACTGTCTTTT 300  
TCTCTGATTC TTTAATAAAT TATCTTTATA GGAATATGCA CAAGTTTTTT TTACACTCAG 360



TGTTAAAGT ATTTATTAAT NGGGAAGTCA ACTTAATGTT TTGAAATAAA NTATATGNCT 420  
CTGGTTAATG CAAA 434

SEQ ID NO:1515  
SEQUENCE LENGTH:423  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

CLONE:HUMGS01726

SEQUENCE DESCRIPTION:

GATCCAGTGA TTCANTCACT TAAATNAAGT CTTTGGTCA GAAATNACCT TTTTGACACA 60  
AGCCTACTGA ATGCTGTGTA TATATTATA TATAAATATA TCTATTGAG TGAACCTTG 120  
TGAACCTCTT AATTAGAGTT TNCTGTATA GTGGCAGAGA TGTCTATTTC TGCATTCAAA 180  
AGTGTAATGA TGTACTTATT CATGCTAAAC TTTTATAAA AGTTTAGTTG TAACTTAAAC 240  
CCTTTTATAC AAAATAAATC ANGTGTGTTT ATTGAATGGT GATTGCCTGC TTTATTTTCA 300  
AGGACCAGTG CTTTGATTTT GATTATGCTA TGTNATAACT GACCCNAAAT AAATNCAAGT 360  
NCAAAATTTAT GTNGNCTGTA TAAGTTTGT AATAANCCAT GNCTGAGGNC AAAAAAGGNN 420  
AAA 423

SEQ ID NO:1516  
SEQUENCE LENGTH:419  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

CLONE:HUMGS01727

SEQUENCE DESCRIPTION:

GATCTGTAAT CTCCACTGCT TGGATGTCTG CCCTCTACCC CAGAGGAATT TACAGAACT 60  
TGCCCTGTGC CTGTGTCCCC CATGCTAGGG GCGGAGGGGT CTTTCCTTC TTCTTTCCTA 120  
CCTACCCCTT TTCTCTTGGC CAGGGGCCCTC GTATCCTACC TTTCTTGTG CCTGGGCTG 180  
GCTGCACAGA GGATTGCCCC TTCTCTTTTC AGAGCTGGCC CTCGATGCCA AATTAGCATT 240  
TAGTATTTTG CACAAAGTCT AAGGGACCAT GGCTGCCTGC CTTGGGGAGG AACCATAGCT 300  
CCNTCTGGGC CGCTTCTGGC CTCTTGGAGC CATGGGCCAA AGGCAAGGGG ATGGGCAGAG 360  
GTCTGTGTTT GGTCTGGCCC AGTCCNCAT CATTAACTC AGCCTGACTG CTGCCTAAA 419

SEQ ID NO:1517  
SEQUENCE LENGTH:419  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

CLONE:HUMGS01728

SEQUENCE DESCRIPTION:

GATCCTCAGT AGANCAGTCC AGAAGCCTGA NAGACAGTGG CCCCTTGATA ATCTGGGTCT 60  
CACGGGNCCA GCTAGGGGTC CAGGTTTCAN TCAGTAAATA AGAGTGGTCC ACGTCCTAAA 120  
GACACCTCTC CTNNACAAAG ACTTGTGATG CTCTGGGGNT TCTNTGGCCA AGCCCCACCC 180  
TTTCCTGGTC ATGGTACCCG TACAGCGTTG ATGGCCACAG CTCGAAGGGG GGCTTTCGTG 240  
TCCCCCTGTG CGGTCAAGTGT TTTCAGTACC ACCTCTCTCC CGTGCCCACT TGGCTATTTA 300  
CTTATTTATT TATTGTGTGC CAGTNATGGT GGGTGGGGGC TGGGCCTTCC CCGCCACCTN 360  
CANCCCTGTT GTGACCTGTC CTTCCGTACT TAATAAAGTG CGCGTGNGGA GTTGTTAAA 419

SEQ ID NO:1518

SEQUENCE LENGTH:418

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01729

SEQUENCE DESCRIPTION:

GATCTNAGCC CTCCGGTTCC TGGGCAGAGA GAAAGGCTAC AGGTTCAATT NCCTGACGAC 60  
 AGCAGTCACA AACAGCGCTC GCNTTATGGA GGCCATNAGT GAGGTGAAAG CCTGATGTTT 120  
 TTCCCGGCCA NTNTTGACAT CTTCCTGAA CACATTCCTC AGTGAGATGC AGGCATCTGG 180  
 CACCCAGCTG CTATAACCAA GTGTCCACCA ACTACCTGCT AAGAGCCGGG AGCATGGAAC 240  
 GTGTTGGGAT TTAGAGAACA TTATCTGAGA AAAGAGTTCA CTTCCTGCTC CCAGGATATT 300  
 TCTCTTTTCT GTTTATGAAG TACAACCCAT GCTGCTAAGA TCGAGCAGG AAGAGGCATC 360  
 CTTTGCTAAA TCCTGTTTGA ATGTCATTGT AAATAAGCC TCTGCTCTCA GATGTAAG 418

SEQ ID NO:1519

SEQUENCE LENGTH:404

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01730

SEQUENCE DESCRIPTION:

GATCCAATTT ACAGAAATCA GAGTTAGCTA CAGCTAGGAC TCGTTTGGTT GGGGTTTTTT 60  
 AGTTTGTCTT TCTAAAGTCA TGTGGACCTT AATTAAATTA CAAAAGTCTA CCCTGGTGGT 120  
 CATAAATAG GCAGGCCTAT GAAGAAAGGC CTTTACTCT TCCATCTCGT CCCAGCCCCG 180  
 AGTTGACCCA CGTTGCTGCT CCTCACACCA TGGTGATGCA GGTCTCGTAG TGTGGGCACA 240  
 GGCCTGGCTA CCTCATCTTT TTAGTGCTTC TCTCCTCTC CACAGGATGG GGTCCACAG 300  
 CTGCAGCAGC TGGCCCGGTA GTTGAGCATG TGTGGTTATC CTGTAGAGCT TTTCCCAAGA 360  
 AGGGTGTTTG AACTTAGAGT CTTAATAAAA TCTTACCAAA TAAA 404

SEQ ID NO:1520

SEQUENCE LENGTH:402

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01731

SEQUENCE DESCRIPTION:

GATCTACAGA TACGTGATAT TNTGGTATAA CTAGAATCTT GATTTCITTC ATAAAGTTCT 60  
 GCCATGTTCT ATTTCTTTCC TTAATGTTTT TTTCTTCCCT ACTGTTTAT CCTCCCTTTG 120  
 CTTTGGAAGG ATATTNCTGC ATATCGAGCT AAAGGAAAGC CTGATGCAGC AAAAAAGGGA 180  
 GTTGTCAAGG CTGAAAAAAG CAAGAAAAAG AAGGAAGAGG AGGAAGATGA GGAAGATGAA 240  
 GAGGATGAGG AGGAGGAGGA AGATGAAGAA GATGAAGATG AAGAAGAAGA TGATGATGAT 300  
 GAATAAGTTG GTTCTAGCGC AGTTCTTTTT NNCTTGCTTA TAAAGCATT AACCCCTG 360  
 TACACAATC ACTCCTTTTA NNGAAAAAAA TTGAAATNTA AA 402

SEQ ID NO:1521

SEQUENCE LENGTH:407

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01732

SEQUENCE DESCRIPTION:

GATCTCAGCT GAACAAATTA GATGTTTCAG TTGCTCTTGG GTCAACTGGC TTACAGATTT 60  
 ACATGTGCAC ACACACACAA ATTTCTTATC ACATTTTCGC CTTCTTCACT TGACCTAACT 120  
 GATTATGCGA AATACCCAAG ATTCATGCTA CTGTACCACA GATTGTGTTT CACAGCAATA 180  
 AATCTTCAGT TCTTTGTTTA TGATTCCACT TAACAAAAGG CCTGCAGAAG TGATTTATTA 240  
 TTTGGGTATT TGGAGATAAT ACATTTGATG GTTTTTTGGG AAACCTTTT CACTCCATAC 300  
 TCAGATATGC TTCATTGTCA AATGCATATT TAGGNTAGGT TAATNGAATT GTAATGTTTA 360  
 ACCTGCTGCT TTTTTTTAA ATAAAAATTT GACTGAAAAT GGTAAA 407

SEQ ID NO:1522

SEQUENCE LENGTH:397

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01733

SEQUENCE DESCRIPTION:

GATCTAGTAG CCACGCTAAA AAACAAGTAA AATTAATTTT AATATATTTA ACTCAATACA 60  
 TTGGAGATAT TATTTAGAA CGATATTTT CATTCTTATG AAATAAGTC TGTCTGGTTT 120  
 GCATATCTCA GTTGAGACAC TAAAGTTTAA CTGATAATAC TTAATCCATN NATTAGATTT 180  
 CATAAAATCT AAATTGCAA AGTAAATTTA CATACCCATG TNGGTCTAAA TGTGCTTAAA 240  
 AGTTTTCCAA TAACTGAAAT GAGTATCAGT TTTAAATTTA AAAATTTGTT ACTTGGTTAC 300  
 TCCATATTTT AGGTATTAGT GGCTACCATA TTGGTCAGAG CAGATTCATA GGGATGATTT 360  
 CCCAGGTTTG AAGTGTGTGT ATATTGCTGG TATTATN 397

SEQ ID NO:1523

SEQUENCE LENGTH:395

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01734

SEQUENCE DESCRIPTION:

GATCTGTACG AAATGTGAAA TTTTAGGGA CATCTCCATG CTGTCACTTG TNATTTGCCC 60  
 TCTNATGTAT TTNGGTCATA TTGCCAACTG GAAAGTCAAA ATTCCTAAC AACTTTAAGT 120  
 AAGTCCTTTN AAGACTNAGT GCTGTTTNA ATCCAGTTA GAAAGTAACT TAATTTTAAT 180  
 ACCGCTACTA AAAATNCGAA AATTCTCCT TTAATCACAT TCAATATGGT TAAANGAACA 240  
 AACTAATTG ACATTGCGTG GGCTTTTCCT CCCTTTGTTT AAANANGTCA TTTGTTGAG 300  
 CAAGNGGTTG TATAGTATTA TCTACTNNCT TGAGGCTGTT AAATTTNCNA TTCCAGNGGT 360  
 TTTGTAAATG TATCCCGGGG CCNTGNTGCA TTGGN 395

SEQ ID NO:1524

SEQUENCE LENGTH:391

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01735

## SEQUENCE DESCRIPTION:

GATCTCAATG ACCTGGCGAA GACTGGAAAA TACAACCTCC ATCACCAGCA GAGTTGCTAG 60  
 GCTGCTGCTG TATGGGTACA GAGAAGGGTT TGACAAAATT GACCTGACTG TGGAAGAACT 120  
 TCCAGCAGTT TACACAGGAC TGTTTATAA ACTCTATCAT AAGGAACTGC CAGAGAATTA 180  
 TAAAACTATG AAAGGAATTG ATTAATTCA CATTATATG TTTAGAAACA TGTAGACTAA 240  
 CGAATGACAT AAGAAATAGT GGACATTTTG GATTGATTAA ACATCTGACT GTGATTTTCT 300  
 AATGTATATG ATTTCCATGA AGAAATTTTG TTTCTAAACA TGCACATTTT AAAAGCCTCT 360  
 TTTTGAATAA AGCAAATGCG TGAANAANGAA A 391

SEQ ID NO:1525

SEQUENCE LENGTH:388

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01736

## SEQUENCE DESCRIPTION:

GATCCGGCGC CACAAGACCA CCATCTTCAC GGACGCCAAG GAGTCCAGCA CGGTGTTCGA 60  
 ACTGAAGCGC ATCGTCGAGG GCATCCTCAA GCGGCCTCCT GACGAGCAGC GGCTGTACAA 120  
 GGATGACCAA CTCTTGGATG ATGGCAAGAC ACTGGGCGAG TNTGGCTTCA CCAGTCAAAC 180  
 AGCACGGCCA CAGGCCACGC CACAGTGGGG CTGGCCTTCC GGGCAGATGA CACCTTTGAG 240  
 GCCCTGTGCA TCGAGCCGTT TTCCAGCCCG CCAGAGCTGC CCGATGTGAT GAAGCNCCAG 300  
 GACTCGGGAA GCAGTGCCAA TGAACAAGCC GTGCAGTGAG ACCCCAAGA GGCCCATTTT 360  
 CCCCATAAA AGAGATTGAG GAGTCAAA 388

SEQ ID NO:1526

SEQUENCE LENGTH:388

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01737

## SEQUENCE DESCRIPTION:

GATCTTATTT CTCTACTCA ATTGTATATT TATACCCATT AATCAACTTC TGTCTTGCT 60  
 CTCTCCGTGC TACCCTTCTG GCCTTTGGTA ATCGCCAATC AATCTACTCT CTATCTTCAT 120  
 GAGACCAGCG TATTTAGCT CCCACATATG AATGAAAACA TATAATATTT GTCTTTCTGT 180  
 GCTTGACTTA TTTTACTTAA CATAATGACC TCCAATTCCA TCCATCTTGT GGCAGTGACA 240  
 GTATTTCATT CATTTTGTG TGAATTATAT TTCGTTGTGA ATATACATTA CATTTTCTTT 300  
 ATCCATTTCAT CACTGATGTG CACTTAGGTT GATTCCATAT TTGGGCTATT GTGAATAGTG 360  
 TGTTAATAAA CATGAGAGTG CAGTTAAA 388

SEQ ID NO:1527

SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01738

## SEQUENCE DESCRIPTION:

GATCTTCCTG GTCAGCGCTC TCTTAGCAT ACTCTTCCTC TATTTGGCTC ACAAACAGGC 60  
 ACCAGAGAAG CAAATGGCAC CTTGAACTTA AGCCTACTAC AGACTGTTAG AGGTGATACT 120

ATGACCATGA GTAGCATCAG CCAGAACATG AGAGGGAGAA CTAACCTAAG ACAATACTCA 180  
GCAGAGAGCA TCCCGTGTGG ATATGAGGCT GGTGTAGAGG CGGAGAGGAG CCAAGAAACT 240  
AAAGGTGAAA AATACACTGG AACTCTGGGG CAAGAGATGT CTATGGTAGC TGAGCCAAAC 300  
ACGTAGGATT TCCGTTTTAA GGTTCACATG GAAAAGGTTA TAGCTTTGCC TTGAGATTGG 360  
CCTCATTAAT ATCAGNGACT GTAAA 385

SEQ ID NO:1528

SEQUENCE LENGTH:377

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01739

SEQUENCE DESCRIPTION:

GATCCGTA CT CAGAACGTCC AGGAGAGACG CATGGCCCGA AGTCAAAGTG CTGGAATTTT 60  
CCAAAACAGC CTGTTCTCTC CTCTCTCTCTC CCCAGAGCAC CCCCTGCCAT CAGGGGGGTT 120  
GAAATCCCTC TCCCCCAGGA GCCCTGCTGC TTTGCTTGGT GGTAGGGCAG GAGAGCAAAC 180  
AAACAGTCAT GGTCTAAAAC CCACATAGCA CTTTGCTCTT AGTTACATGT AAAATTTTAG 240  
ATTTCTAAAA CAGGTGGGCA ATCATTTTGA ATACTGTTCT GTGACCCTGA CTGCTAGTTC 300  
TGAGGACACT GGTGGCTGTG CTATNGTGTG GCCATGCTCC NTTGTCCTCG TNCCTGTTGG 360  
CTGCTTCTGT TTAGGTN 377

SEQ ID NO:1529

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01740

SEQUENCE DESCRIPTION:

GATCCAAGGC CTGTGGTAAA CGGGAGANCT TGTNTTTTTC AAGTGGAAAA AAACCCAAGA 60  
GTTTGTNCAG ACATCCTGTC TTCCAGAGA AGGTGGACAC TCTTGGNCTC ATTGTAAAGT 120  
GCCTGCTGNA TCAATAAAGC TCTTGGCTTA TTAGTCTATA AAACAAA 167

SEQ ID NO:1530

SEQUENCE LENGTH:372

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01741

SEQUENCE DESCRIPTION:

GATCCACACG TTCCGGGACT ACCTGCACTA CCACATCAAG TGCTCTAAGG CCTATATTCA 60  
CACACGTATG CGGGCGAAAA CGTCTGANTT CCTCAAGGTG CTGAACCGCG CACGACCAGA 120  
TGCCGAGAAA AAAGAAATGA AAACAATCAC GGGGAAGACG TTTTCATCCC GCTAATCTTG 180  
GGAATAAGAG GAGGAAGCGG CTGGCAACTG AAGGCTGGAA CACTTGCTAC TGGATAATCG 240  
TAGCTTTTAA TGTTCGCGCT CTCAGGTTT TTAAGGGATT CTCGGTTTGT GTTCCATTTT 300  
GTACACGTTT GAAAAATAAT CTGCAGAAAC GAGCTGTGCT TGCAAAGACT TTCATAGTTC 360  
CCAAGANTTA AA 372

SEQ ID NO:1531

SEQUENCE LENGTH:372

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01742

SEQUENCE DESCRIPTION:

GATCCACTGT TGGGGCCTCG ACGAGTTCCT GTCCTGGGAA AGGAGTACAC CGAGAAGACC 60  
 CCCATTCTGT AGCATGCTGT TTTCAATGTG GACCTCATGA GCAAGAAAAT TCATCTGACT 120  
 GAGAATGGGA TAAGGTGGA TATTGGCGAT ACAATAATCT ATCTGGTTCA TTAAGTCTAT 180  
 GCACATTGGA GATTTATCCT GGTTCCTTAG GAATACTACT ACTCTGATTG TGTCTACTGA 240  
 TTGGCTATCA GAACCTTAGG CTGGACCTAA ATAGATTGAT TTCATTCTA ACCATCCAAT 300  
 TCTGCATGTA TTCATAATTC TATCAAGTCA TCTTTGATTC CTGGACCTAA TAAATTTTTT 360  
 TTCCCTTTCA AA 372

SEQ ID NO:1532

SEQUENCE LENGTH:368

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01745

SEQUENCE DESCRIPTION:

GATCCCAATC ACAATTATCA CCGGGTATTT AGGTGCTGGG AAGACAACAC TTCTGAACTA 60  
 TATTTTGACA GAGCAACATA GTAAAAGAGT AGCGGTCATT TTAATGAAT CTGGGGAAGG 120  
 AAGTCCGCTG GAGAAATCCT TAGCTGTCAG CCAAGGTGGA GAGCTCTATG AAGAGTGGCT 180  
 GGAACCTAGA AACGGTTGCC TCTNCTGTTT AGTGAAGTGA GGAATGTGTT TACTGTGTAC 240  
 ATGGTTTACT AGAAATGTTT ATTGATTATA TTTCCAGCTT TAATTTTCTT GAGTAATTTA 300  
 ACTGAATTTA CACAGTTTGC TTCATTGTAT TTTCAAACAA ATAGAAAATA AACTTATTAG 360  
 GAAGCAAA 368

SEQ ID NO:1533

SEQUENCE LENGTH:364

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01746

SEQUENCE DESCRIPTION:

GATCGTCCCC GTATGATGAT TGTNAGAAGA CAGGACTAAG TAGCAGAGAA TAGCTAAGAG 60  
 ATAAATTGGG CTGGGGAAAC TTGTCAGAAA GCACTGAACA ATTAAGAAAT TTTCCAAGAA 120  
 AATGTGCAGT ATTCTCTGCT ACTTCTGAAT CTGTTTTGTC TTCCTAATCT ATCACAATTG 180  
 CCACCATCG GGTTTTGGGT GTGTGTTTTT ATAGCGTGGT TACTTTCTAT AATGCTGTAC 240  
 CCAGATTCTA AGAACCTGGA GAAGGATTAG CAGTTCTTAG TAAGTTTACT GTGTATAGGA 300  
 ACGGTTTGTA TTTTATTACA GCTATTATC TTTTCTACAT TAAAAATATT TTTCTCTAAA 360  
 GAAA 364

SEQ ID NO:1534

SEQUENCE LENGTH:362

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01747

SEQUENCE DESCRIPTION:

5 GATCTGTGCC ATAAATTTT AGTGAATAA GACTTCTTCA ATACATCTTC CAATAAGGGG 60  
 TGCTTCTTTG TGACAGTATT TTTATTTCTG ACATTCATTT TATTGGGTA CATAGTGTGG 120  
 TTGTTGATAC CTTGCAATAG TATTGCTTCT GAAAGTAATA AAAAATTTTA GGAGAATTG 180  
 AGAAGTTTAC AGAATTACTT ATTCATTGTT TTCTTAGTAA GTCAGTTTAA TGTTTATTTT 240  
 TCTCATTATT TCATCACTGC AATAAAGAAT AAGGGTGTTC GAGCTCACCT CCATGCAAAG 300  
 10 ACTTCAGTTT TAAACATTA TTGCGCTAAA ATTAGCATTG TGATGCTTTC TGAAAGAAAT 360  
 AN 362

SEQ ID NO:1535

SEQUENCE LENGTH:361

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01748

SEQUENCE DESCRIPTION:

20 GATCCACCTC TCCTGTGCTA AGATTAAAGAN GACCAACGTC CCCGANTTCT TTNATTGCCA 60  
 GAAATGCAAG GAACTGAGGC CAGAGGCCNN GCGGTTAGGG GGGCCTCCCA AATCTGGAGA 120  
 GCCTGATGG CACCAACTTT AGCCTGGAAC TTCCAAATNA CAACATGATT TGGGAACCTGA 180  
 GCCTCAGGGT CCTCAGCCTA TCCCTGGAG CTTGGATACT GTCTGCACTT CAAGGCAGGA 240  
 ATTCTCAAGG GAGACTTGTT TGAAATNAG TGTCTCACTT TCCCACCCTA TCCTTCCTCC 300  
 25 CCACTCTGTG GACTTGAAAT TGAATCCATT ACGGTTGGGG ATGGGAGGCT GTCTGTGTCC 360  
 N 361

SEQ ID NO:1536

SEQUENCE LENGTH:360

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01749

SEQUENCE DESCRIPTION:

35 GATCGATTCT CTCTATGAAG GAATCGACTT CTATACNTCC ATTACCNGTG CCCGATTNNA 60  
 AGAACTGAAT GCTGACCTGT TCCGTGGCAC CCTGGACCCA GTAGAGAAAG CCCTTCGAGA 120  
 TGCCAAACTA GACAAGTCAC AGATTAAATGA TATTNTCCTG GTTGGTGGTT CTACTCGTAT 180  
 CCCCAAGATT CAGANGCTTC TCCANGACTT CTTCAATGGA AAAGAACTGA ATANGAGCAT 240  
 40 CAACCCTGAT GAAGCTGTTG CTTATGGTGC AGCTGTCCAG GCAGCCATCT TNNNTGGAGA 300  
 CAAGTNTNNG AATGTTCAAG ATTNCTGGC TCTTAGGNTG TCACACTCTT TTTCCCTTAN 360

SEQ ID NO:1537

SEQUENCE LENGTH:358

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01750

SEQUENCE DESCRIPTION:

50 GATCCCACTG AATCCTGGGT CCAGGAGTAC GTGTATGACC TGGAAGTGAN CTGAGCTGCT 60  
 CAGAGACAGG AAGTCTTCAG GGGAGGTCAC CTGAGCCCGG ATGCTTCTCC ATGAGACACA 120

55

TCTCCTCCAT ACTCAGGACT CCTCTCCGCA GTTCCTGTCC CTTCTCTTAA TTTAATCTTT 180  
 TTTATGTGCC GTGTTATTGT ATTAGGTGTC ATTTCCATTA TTTATATTAG TTTAGCCAAA 240  
 GGATAAGTGT CCCCTATGGG GATGGTCCAC TGTCACGTGT TCTCTGCTGT TGCAAAATACA 300  
 TGGATAACAC ATTTGATTCT GTGTGTTTTT ATAATAAAAC TTAAAAATAA AATGCAAA 358

SEQ ID NO:1538  
 SEQUENCE LENGTH:354  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01751

SEQUENCE DESCRIPTION:  
 GATCCCTCCT CTAGGGGCCT GGGGACTTTN ACTGATGCTC TTCCTGATTC TAGAGCAAAG 60  
 GTGTGGGAAG GGGAAATGGA GGAATGCCCT CCTGTCTGTN TCGTTCTCTG TGCCACAGCT 120  
 ACAGATGCAG AAGGTTTCTC TGGATAGCAC ACCTCTGANT GTAAATCATG ATAAAAATGGA 180  
 TATTTGAAA CTTACTCCTA AGCTGTGATT TAGGGTGTAT TTCTACTTCT GGAAGTGCCTC 240  
 AATATCAAGG GCTGAGACTT TTGAATTTTG AATATTCGTT GGGTTTCATG TTAAGANGCC 300  
 TGTGGTCTAG GAGTGCTATT CAGTGTTCCT TTCCTGATA AACACTTTGA ATAN 354

SEQ ID NO:1539  
 SEQUENCE LENGTH:352  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01752

SEQUENCE DESCRIPTION:  
 GATCTCAGTA TGGACAGTGT AACAAACAAA CCAAAATGGC TGGACAGACT TCTTGTGTTT 60  
 TGTAATATA AACTAGGACA GTTCTGTAGG TTTGTTCACT GTGCTAGTGG AGTATTTCCT 120  
 TAATGTAATA CTTCACTTAA CAGAGAGATT CTTTGTCTAG CAAGCTTGGN GTGATGATAN 180  
 AGNGGTAAGA AATAATATAA ATGTTGAAGA AAGCATCACA ACAGAACTAT AGGAGTCTAA 240  
 ATTTAATAAA TCTTTAAAAA AAACCACTGT CTAGAAATA TACCATGTTT TATTATTAA 300  
 AATCATTGTC TAAATTTTTT GTTCAAAAAA TAAAAATTTG AATACAATCA AA 352

SEQ ID NO:1540  
 SEQUENCE LENGTH:351  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01753

SEQUENCE DESCRIPTION:  
 GATCAGACAA GCCCAAACCTG AGAGACACTC TACAAAATAA CTGGCCAGTA CGTTTTNCAA 60  
 GTNCCAAGGC CGTGAACAAT AAGGAAAGAC TGAGGAACAG TCATGGACTG GAAGAGAGTA 120  
 AAGAAATATG ATAACATACT GCATTGTGAG ATACCGATTT AGATGTTGGA TTAGAAAAAG 180  
 GACCAGAAAT AAGATTTCAT CAATGTCAAT TATTTGGTTT TGATAATTGT ACTGTGGTTA 240  
 TGTAAGATGT TAACATTAGT AAGAGCTGGG TGAAGGTAC ATGGAACTA TTATTTTTGC 300  
 CACCCTTTGA AAGTCTAACT TTTTCAAAA TAAAAAGTTT TAAAAATAA A 351

SEQ ID NO:1541



SEQUENCE LENGTH:357

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01754

SEQUENCE DESCRIPTION:

GATCCCAGAT GCAGTGACTG GTTACTACCT GAACCGTGCT GGCTTTGAGG CCTCAGACCC 60  
ACGCATAATT GGGCTCATCT CCTTAGCTGC CCAGAAATTC ATCTCAGATA TTGCCAATGA 120  
TGCCCTACAG CACTGCAAAA TGAAGGGCAC GGCCTCCGGC AGCTCCCGGA GCAAGAGCAA 180  
GGACCGCAAG TACACTCTAA CCATGGAGGA CTTGACCCCT GCCCTCAGCG AGTATGGCAT 240  
CAATGTGAAG AAGCCGCACT ACTTNACCTG AGCCACCCAA CCTAAATGGT ACTTATCTGT 300  
NCCCATGTNC NTACACCAGC CTGTTTNNAT AATAAACTTT ATTGGTGGTA GGGNAAA 357

SEQ ID NO:1542

SEQUENCE LENGTH:412

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01755

SEQUENCE DESCRIPTION:

GATCAGGGCA GTAGGCATAA TTCAGCAACA AACAATCTTC CTTTGGGAGA AACCTNTTCA 60  
TTCCAATCTT CTAATTACAG TGGTTCCTAT CTCAGGGATA CTGGACTTIN TGACGCAGAT 120  
GAACAATTAA GGGGAAAAGC TTCCCTTTTC CCTCTGTGGC AGTTACGATT TTNACTTCAG 180  
TCCTGAGAAA AACTTCAGGT TTTGAAAATC AGATGATGTC TTCTCCTTTT CCAANCACCA 240  
CACGTTGAAA GCNTTTATAA ATCCAAGTCT GAAACTCTGC GCTCTAGTAC TGCTGTTAAG 300  
NTACACAAC TGTTCCTNN GTTCATATAA TCTNGGGGTA CNCACNCACA CACNCNTGTA 360  
TGGGGGGGGG GGNNTGGCGN TTNCCACCGC GCGTTCNTT TTTGNNGGGT CN 412

SEQ ID NO:1543

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01756

SEQUENCE DESCRIPTION:

GATCCCAAAA TGCTGCGGGG CAATGACAGC TCAGTCCCA GAAATAAAAA TCCATTCCAA 60  
GAGGCCATTG TTTTGTGGT GGGAGGAGGC AACTACATTG AATATCAGAA TCTTGTGAC 120  
TACATAAAGG GGAAACAAGG CAAACACATT TTATATGGCT GCAGTGAGCT TTTAATGCT 180  
ACACAGTTCA TAAACAGTT GTCACAATT GGACAAAAGT AACACAGAAG AACCTTACTA 240  
TGATAATCTA CTTGGAATGT GGATAAATGT AAAANGNAGA AAAGTTAGAA NGNGCANTAT 300  
GTTTCCTTCT CTGTAACAGT GTCCTAACAG TGAATAATCA GGN 343

SEQ ID NO:1544

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01758

SEQUENCE DESCRIPTION:

GATCGANCTT NCTATGGACT CAAGCAGGTG NNGAAGGCCA ATNAAGCCAT GGCAATTGAC 60  
 ACATTGCTCA TCAGCGATGA GCTCTTCAGG CATCAGGATG TAGCCACACG GAGCCGGTAT 120  
 GTNAGGCTGG TGGACAGTGT GAAAGAGAAT NCAGGCACCG TTAGGATATN CTCTAGTCTT 180  
 CACGTTTCTG GGGAAACAGT CAGCCAGTTG ACTGGGGTAG CTGCCATTCT CCGCTTCCCT 240  
 GTTCCCGAAC TTTCTGACCA AGAGGGTGAT TCCAGTTCTG AAGAGGATTA NTGATTGAAA 300  
 CTTAAAAATT GNGACAATCT TTGTGTTTTC CTAAACTGTN 340

SEQ ID NO:1545  
 SEQUENCE LENGTH:339  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01759

SEQUENCE DESCRIPTION:  
 GATCTGCTTT CATTAAGTGG AATTCTGTAG GAGATACTGG TGACCTAAGC TAAGTTGCAC 60  
 TCAGCATACT CAGTGTCAAG CTAATGAGGT TCTATTATAA AGGTTCTACT TTTAATCTGA 120  
 GGGAAAACAT GTTCAGGGCT TCTAGAACAC TAAAAAATTN GGNTTAAACC AGTGTNCAGT 180  
 CTGGTGCCAA ACTTCGAATG GAATACAAAT NNACATAATC TGANCTTTGT NCACAGGTTA 240  
 TCCTAATAGA GTAATTCTCC ACTTGCTCT ATTGAACTGT CTTAAGGGAT TTGTTTAAAC 300  
 AGCTAAGTTA CTTGATTAAA ATAATGATAA AATTGTAAA 339

SEQ ID NO:1546  
 SEQUENCE LENGTH:362  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01760

SEQUENCE DESCRIPTION:  
 GATCTGGTAG AAGGTACCAG CTTCTTTTCC AGCTGGAGAG GCCCAACAC TGGATGGTTC 60  
 TGTAGGGAGC CTAGGGAGCC TGGTCATCAA CTTGCAATAC CTCACAGAGC CAGTTCACAT 120  
 CCCACTCTGA GCTCCCACGA GAAACACTGC TTCTCCAGGC CCGGGTTTGT TGGGGAGAGA 180  
 GGCAGAGGCA GCTGGAGCGC CGTTCTCTCC TGCTGGGACA CCGCTTGGGC TTGGTATTG 240  
 ACTGAGTGGC TGACAGTTAT CTTCCAACCC CAACTGGCTT GGGGGCAGGA CAAGGGCTTA 300  
 GGCTTGATGG TGGNCAGGCT TGNCTGCTCC CCACCTGNGA TGCCCTGCT CTGGGACCTC 360  
 TN 362

SEQ ID NO:1547  
 SEQUENCE LENGTH:335  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01761

SEQUENCE DESCRIPTION:  
 GATCCTTTCA GAAAAGAAAC ACTGGGTCCC ATAGCTAAAT TCTCAACCGC CANGCACCTT 60  
 CAGAAGAATC CAGCCTAATA CTGGAATTTG TGCTATTATC TTCCTCTCCA GCCCCCCAAC 120  
 TCCATCCCTC ACCACAGTTG TCTAGGAAAT GACATGAATT CAATATCTAA TGTCACCAA 180  
 TGGGGAGAGC CACAACCTCA GGAGAGGTTT CTGAGCTGAG TCCCTTAATT TCTGGATGAA 240  
 GAAGACCAAC AAGTTTTGTC CAATGTATTT GTTCTCAGA CCTTGCCTAG GCACTAAAAA 300

TAAAATACTA GGTCAATGGA GGCTAATGTG GGAAA

335

SEQ ID NO:1548

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01763

SEQUENCE DESCRIPTION:

GATCATTAAAG GAAGGCGATG TAGATGTTTC AGATTCTGAT GATGAAGATG ATAATCTTCC 60  
 TGCAAAATNTT GACACATATC ACAGAGCCTT GCAAATAATA GCAAGATATG TACCATCATG 120  
 AGTATACTGN TCCTTATTTT GAATGTTTAA TTCTCAAGAA AATTGTAATC AATTAGTAAA 180  
 AATTATAAAA TGTTAATAGT ATTAAAGCTT GAGTCTTACA TTGCATTTT TTTTNGNA 240  
 NCCACTTGGG GAACCATTC ATNCTCCAAA ANGGGGCATT CCCATTCCT NTTNATCCCC 300  
 TNNAAATGGT TTNCAAAGT NGTNTGCNGN 330

SEQ ID NO:1549

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01764

SEQUENCE DESCRIPTION:

GATCATGGTG GATGAGGAAG CCTCAACGTA GATTCCTGAA CTCAAGGTAC CAGCAAGANT 60  
 GCNTTCTCCC AGTGTGCTCT CCCCAACATC CTAGGCACAG CTTTCATAAC CCAGTTTCTT 120  
 AGGTGTAAGA AACTGTTT TNATCTATTA TTAAGTCTCA GAACTTAACA GAAAAGGAAG 180  
 CCTTTTAAAT ATTCTTTT ATNTTATTT AGATTAACAG TTTTGNACTT TACATTTTTT 240  
 TATACAACCA NCCAGTTTCT TTNCTAGCCA ATCATCTCTG ANGAGTTGCT GTTCTTACT 300  
 GACAATAAAA NNTGTNCTCT TGGTTCGAAA 330

SEQ ID NO:1550

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01765

SEQUENCE DESCRIPTION:

GATCAACATC TTTCTTGCC TCTGTCCCT TCTCTCATCT CTTAGCTCCC CTCCAACCTG 60  
 GGGGGCAGTG GTGTGGAGAA GCCACAGGCC TGAGATTTC TCTGCTCTCC TTCCTGGAGC 120  
 CCAGAGGAGG GCAGCAGAAG GGGGTGGTGT CTCCAACCCC CCAGCACTGA GGAAGAACGG 180  
 GGTCTTCTC ATTTACCCC TCCCTTCTC CCTGCCCCC AGGACTGGGC CACTTNTGGG 240  
 TGGGGCAGTG GGTCCCAGAT TGGCTCACAC TGAGAATGTA AGAACTACAA ACAAATTTT 300  
 TATTAAATTA AAATTNTGT GTCTCCAAA 329

SEQ ID NO:1551

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01766

SEQUENCE DESCRIPTION:

5 GATCCCAACT GTCCTCTNCC CTCGCCGGTG ACTCCTGCAC CTGGCCCGGC TCCTGCAAAT 60  
 GCAAAGAGTG CAAATNCACC TCCTGCAAGA AAAGCTGCTG CTCCTGCTGC CCTGTGGGCT 120  
 GTGCCAAGTG TGCCAGGGC TGCATCTGCA AAGGGGCGTC GGACAAGTGC AGCTGCTGCG 180  
 CCTGATGCTG GGACAGCCCC GCTCCAGAT GTAAAGAACG CGACTTCCAC AAACCTGGAT 240  
 TTTTATGTA CAACNTGAC CGTGACCGTT TGCTATATTC CTTTTCTAT GAAATAATGT 300  
 10 GAATGNTAAT AAAACAGCTT TNACTTGAAA CAAA 334

SEQ ID NO:1552

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01767

SEQUENCE DESCRIPTION:

20 GATCTGTTTG GACTATGTTT TCTTTCTTC TCCCACTTGC TCAGCAGCTT GGGCTTCCAT 60  
 TCTAGTTCTT TTACCAAGAT TTTGTGTGA CCATGTTGAC TTCATTTGGA TTGCCCTCTT 120  
 TCAATTCCT TGTGAAAACA CCCTAACTT TCTCTTACC CTTAGCTGAA ATGTTTACAT 180  
 AGCTTCTGGT GATATCTTN CATGATTTA TATCTCTAA AATGGTGATG GATGTGACAC 240  
 CTCATAAAG TGAGCTTTGA ACTGTAGATA ACTCTTAAAG AAAATGTCAT TTTAGACAAT 300  
 25 TAAATATTT GTGCTCAACT GCTTGAAA 328

SEQ ID NO:1553

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS01768

SEQUENCE DESCRIPTION:

35 GATCGAAATG TTAACACCGG GAGCTCTNCA GGACACTCAC CCAGCGACGC TCGTGGGGGA 60  
 AACATACTAA ACGGACAGAC TCCAAGANCT GCCACCGCTG GGCCTGCACT GCGGCCCCC 120  
 ACGTGAACCT GGTGTAAACG GGCCNGGGAA GAAAAGCAGA GAGAGAATTG CAGAGAATCA 180  
 GACTCCTTTT CCAGGGCCTC AGCTCCCTCC AGTGGTGCC GGCCTGTA CTCTGACGAT 240  
 TCCACTGTAA CTACCAATCT TCTACTTGGT TAAGACAGTT TTGTATCATT TTGCTAAAAA 300  
 40 TTATTGGCTT AAATCTGTGT AAAGAAA 327

SEQ ID NO:1554

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS01769

SEQUENCE DESCRIPTION:

50 GATCAGCAGA CCACGTATTT AAAATTCTGA ATCTTCTGGG ACAGGGTTGT AACTCAGCCT 60  
 TCCAAAGGGA AGAGTGCAGG GGGACGGGGC CATGATATGG GGAAATGGTG TAACTAATG 120  
 TATTTNTTAA TTGGCTGTTA TTCTGTATAA CACTCATATC TTTGCCAAAG TTCAATTTA 180  
 TATTTAGGCA ACTGATGGTC CTTTGCATT TAGGATTTN GTTGTGTGTA CCTTATACCT 240

55

CATGATATAA GGAATGGGCT CATGTGTCTT CCGTCTTTTG GAAGGAGGTT GACATATTTT 300  
 AAATAAATGC TTTTAAATAC AGTAAA 326

5 SEQ ID NO:1555  
 SEQUENCE LENGTH:387  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 10 CLONE:HUMGS01770  
 SEQUENCE DESCRIPTION:  
 GATCAAAAAG AACAGAACCC TCTCCAGCCT GCTGACCCGA ACCCAACCAC ACAATGGTTT 60  
 GTCTCAATCT GACCCAGCGG CTGGACCCTC CGTAAATTGT TGACGCTCTT CCCCCTTCCC 120  
 GAGGTCCCGC AGGAGCCTAG CGCTGGCTG TGTGTGCGGC CGCTCCTCCA GGCCTGGCCG 180  
 15 TGCCCGCTCA GGACCTGCTC CACTGTTTAA CACTAAACCA AGGTCATGAG CATTCTGTGCT 240  
 AAGATAACAG ACTCCAGCTC CTGGTCCACC CGGCATGTCA GTCAGCACTC TGGCCTTCAT 300  
 CACGAGAGCT CCGCAGCCGT GGCTAGGATT CCACTTCCTG TGTATGACC TCAGGAAATA 360  
 AACGTCCTTG ACTTTATAAA AGCCAAA 387

20 SEQ ID NO:1556  
 SEQUENCE LENGTH:325  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS01771  
 SEQUENCE DESCRIPTION:  
 GATCACAGAT GGATNTTGTT ATAAGCATCA ATGTGACACT TGCAGGNCAC TACAACGTGG 60  
 NACATTGTTT GTTCTTCCA TATTTGGAAG ATAAATTAT GTGTAGACTT TTTGTAAAGA 120  
 TACGGTTAAT AACTAAAATT TATTGAAATG GTCTTGCAAT GACTCGTATT CAGATGCTTA 180  
 30 AAGAAAGCAT TGCTGCTACA AATATTTCTA TTTTAAGAAA GGGTTTTTAT GGACCAATGC 240  
 CCCAGTTGTC AGTCAGAGCC GTTGGTGTIT TTCATTGTTT AAAATGTCAC CTGTAAATG 300  
 GGCATTATTT ATGTTTTTTT TTTTN 325

35 SEQ ID NO:1557  
 SEQUENCE LENGTH:322  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS01772  
 SEQUENCE DESCRIPTION:  
 GATCTGTAAT TCATAGTCAC ATCAAGGTCA TCAAGACCAG GAAAAACAAG AAAGACATAC 60  
 TCAATCCTGA TTCAAGTATG GAAACTTCAC CAGACTTTTC CTTCTAAAAT CTGGATGTCA 120  
 TTGACGATAA TGTTTATGGN GATAAGGTCT AAGTGCCTAA NAAAATGTAC ATATACCTGG 180  
 45 TTGAAATACA AACTATACA TACACACCAC CATATATNCT AGCTGTAAAT CCTATGGAAT 240  
 GGGGTATTGG GAGTNTTTT TTAATTTNCC ATAGTTTTTT TTAATAAAAT GGCATATTTN 300  
 GCATCTACAA CTTCTATAAT TN 322

50 SEQ ID NO:1558  
 SEQUENCE LENGTH:319

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01773

SEQUENCE DESCRIPTION:

GATCTTTCTT TAATAGTGAA CCCCTGGGCC ACTGAAGAGT AACATGGCTC CACTGGACAC 60  
 AAAAGAGGGA TGAATCAAC AGGCAGGGGG CCTTTTATAA GCCTTAGGAA AAGAAAAATGA 120  
 AACTATTTCA TCTTTGGACT TTTCAATACT ATTGGAGTGA TTTTTTTTTT TCTAAACAGG 180  
 GAAAATAATG TTACAAAAGC ATCTTTTTTG TNATTTGTTT GCATCCCTCC CCCACACCCT 240  
 GGTGTTTTAA ANTGANGAAA AAAANCCATC ACCTTTTGTA CAAAANCTCT TAATGNITAA 300  
 CAAACAAACA AANCAGAAA 319

SEQ ID NO:1559

SEQUENCE LENGTH:316

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01774

SEQUENCE DESCRIPTION:

GATCTGGCTG CGCTATGACT CCGGGAGCGN CACCCACAAC ATGTACCGGG AATACCGGGA 60  
 CCTGACCACC GCAGCGCTGT CACCCAGTGC TACCGAGACA TGGGTGCCCC GCACGCGCCC 120  
 GAGCCCACTC CATTCAATC TNACAGCAGT GTTCTTGCAA TATGAGGAGA CAGTTACAGC 180  
 CACATTATGG CTCTCATTGA ACAGTACGCA GCACCCCTGC CCCCAGCCGT NTTTTTGGGG 240  
 CTTGCGCGAA AATCTACAAG CGGGAANGTG ACCTNGGATT CAAGGGCGGG GAGAGANGCT 300  
 TNAATAAATA ATCGTN 316

SEQ ID NO:1560

SEQUENCE LENGTH:390

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01775

SEQUENCE DESCRIPTION:

GATCTAGAGG GTCGGACCCA CATATTTAAG ATTCACGNTC GTTCAATGAG TGTGAAAGA 60  
 GATATCAGAT TTGAAGTGT AGCAGGACTG TGNCCAAATA GCACTGGTGC TGAGATTAGA 120  
 AGCGTCTGCA CAGAGGCTGG TATGTTGCC ATCAGAGCAC GCGGAAAAAT TGCTACCGAG 180  
 AAGGATTCTT TGAAGCTGT AAATAAGGTC ATTAAGTCTT ATGCCAAATT CAGTGCTACT 240  
 CCTCGTTACA TGACATACAA CTGAACCCCTG ANGGCTTTCA AGTGAAAACT TTAAATTGGA 300  
 ATCCTAACCN TATATAGACT TGTAAATAAC CAATTCATAA ACAAATAAAT GGCTTCAAAA 360  
 TTGAAAAAAA NNNGANNNNN NNNNAGNNNN 390

SEQ ID NO:1561

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01776

SEQUENCE DESCRIPTION:

GATCTGCTTA GAGTGGATT TCACTCAAGT CCTTAGTAAG TGGATTTTGG GGAAAAAAGC 60

ACCTGGGCTT CTGGTTCTTT TTGATAATAT ATAAAATTAT TCATTATGAG GTTGCAGTTG 120  
 TTTGCAAAGG AGAGGCACTC AAATTTGAAA GGTATTTTTA ATGTGATAAT TTGGAAGACT 180  
 TACTCAGATG TTGGTCATTG ACCACTCTGT GCATATATTT CTGCAGAGCT CTGTGAAGGC 240  
 AATGAGTGTC ACTTCCCTCT GCTCTAATAA AGCAATAAAT AATAGCTAAA GGGCTGACTT 300  
 TCACTTCGAA A 311

SEQ ID NO:1562  
 SEQUENCE LENGTH:310  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01777

## SEQUENCE DESCRIPTION:

GATCTTTCTA CAACATTAT CCTGGTTGTT AAGCCCTCCT TACAACATTC TTCTCTCTTT 60  
 GTTTTATAG CTCCATCTCT CCTGCTTCTT TAACTTGATA ATGCATACTT GATTTTCCTA 120  
 TTTGTNATTT CATAAACCAA TTAATACACA GATAAAATGA CTGTATATCA AACCATGTTT 180  
 GTATAGAAAA ANTGGATTN GGATGCCTCT CATATGTAAT TAGTTCTATT AAACATATTA 240  
 ATNGTATTGT TTAATTNGTC AGGTTTTTGA CAGANTTTTG TTTACAGGTA ATAAANNINT 300  
 TATCTCCAAA 310

SEQ ID NO:1563  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01778

## SEQUENCE DESCRIPTION:

GATCGAAAAA AAAATCCAGA ACCTGGGGAA ACTGTGGACC CTACTGTACC TCAAAAGCTT 60  
 ATAACAATCA ACCAACAATG GAAACCCATT GAAGAGTTGC AAAATGTCCA AAGGGTGACC 120  
 AAATGACGAG CCCTCGCCTC TTTCTTCTGA AGAGTACTCT ATAAATCTAG TGGAACATT 180  
 TCTGCACAAA CTAGATTCTG GACACCAGTG TGGGAAATG CTTCTGCTAC ATTTTATAGG 240  
 TTTGTCTACA TTTTNGGGC TCTGGATAAG GAATTAAAGG AGTGCAGCAA TAACTGCACT 300  
 GTCTAAA 307

SEQ ID NO:1564  
 SEQUENCE LENGTH:305  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01779

## SEQUENCE DESCRIPTION:

GATCCTGTGG TTGGCCACTG GCCATAGCTG CTGCCAGCT CTACCCCTCC CAGGGACCTA 60  
 CCCCTCCAG GGACCGACCC CTGGCCCAAG CTCCCTTGC TGGCGGGGCG TCGTGGGCC 120  
 CTGCACTTGC TGAGGTTCCC CATCATGGGC AAGGAAGGGA ATTCCACAG CCCTCCAGTG 180  
 NACTGAGGGT ACTGGCCTAG CCATGTGGAA TTCCCTACNC TGACTCCTC CCCAAACCCA 240  
 GGGAAAAAG CTCTCAATTT TTNATTTTAA ATTTTGTIT GAAATAAAGT CCTTAGTTAG 300  
 CNAAG 305

SEQ ID NO:1565

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01780

SEQUENCE DESCRIPTION:

GATCACAGCT AGAGAATTGA GAATTAAC TA TACTACTAGC CATTTTAGGG CACCAAAACT 60  
TGGGATTAAA CACTTCCTAC TTCCCACTCC CAACTCCTGA AATGAAGTCT TGCTATCTGT 120  
GACTAGTTTT ATTTTGTGC TTTTAATAGT CCGAGCAGTC TTACCTTGT TACACATGTA 180  
TTGACACCAT TTGCTTCAGG CCATGGAGCA CTGTTTCTCC CNTTTTACTA TTTATAGGAT 240  
TCCGTTTTTT CACAAGACTT TTAATAAAAA GAAATTGTAG AAATAAACAC ATTAAAAATT 300  
GAAA 304

SEQ ID NO:1566

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01781

SEQUENCE DESCRIPTION:

GATCTGCTTT CTCGTAATTA TAGATTGGTT TGCATTTTCT AGAAATTTT AAATAAATGG 60  
AAACATATAG TGAGTACTCT TCTTGGGGTG GAAGGAAGTG TGTGTGGCTT TTTTCACTCA 120  
AGCATAATTA ATTTGATACT CATCCAGATT ATGCATGTAT CAATAGTTTA TTCCTTTTTT 180  
ATTGCAGAGT AGTAGTTANN NNCCTGGGTA TNCACAATTT GTTACCTGTT CATCTATTGA 240  
TGGNCAATTG GGGTATTTCC AGTTTTAGCT ATTACAAATA AACCTGCTGT GACATCATGN 300  
CAAA 304

SEQ ID NO:1567

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01782

SEQUENCE DESCRIPTION:

GATCTGCTAT AGCTGTCCAT CAGAGAGAAT ACACGTGGCT ATAACATCTA TAACAAAACG 60  
ACGATTCCTC TACAAGAGGC TGTTCCTNAC TGCTAACGTT GGTGTTTCTG GCGTGGGAAG 120  
AAATGCACAG GCGTGCATGG CATGCACGTN CAGACAGCTG CATTGTAAGA NTNCTGTCAT 180  
GCAGTCTGAA AAGGGAAGAA ACAGGATGGC TTTCTGTAGC CACACCTGTG AGGCGTGATG 240  
ATTGTNGTAT TATTAGATTA CTGATTTTCC TTTTCTGAAA ATACATTTGN NTTTTAATCA 300  
CAAA 304

SEQ ID NO:1568

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01783

SEQUENCE DESCRIPTION:



GATCTGCTGT TGCTGAGAGT NTGAGCGTGG ACTTGATGCA GTNATGACAA ATCATTGCTT 60  
 AGAATTAATG TTTTCAAATG TGCAACTCTA GTTTTTAAAA CAAAATTGG TTCTTTACAT 120  
 TCATTATTTC GTTTTTGTTC CCCTTTAGTA TTTAATGGTC TTTGGAGAAA AAATAATAAA 180  
 ACAGAGTGTT ATATATATAT TTTTGGTGC AAGATAAGAT TTTCTGTTT TTGAAATAAG 240  
 TCTGTAGCAT AAAAGGTAA ACTATTTTAA GGACANANTA AAAATAGGAG TGTATTTAAA 300  
 CAAA 304

SEQ ID NO:1569  
 SEQUENCE LENGTH:303  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01784

SEQUENCE DESCRIPTION:  
 GATCCAGGGA TGAGGATAGA GTGGCCTGAG AGCAGTGCTT GGATTCAGCC TCCTGCTGGG 60  
 TCCTTCTGCT GGATACAGGC ACCAAGAGGC GGGGGTGGAG CAGGGAGCTG CGCCTTCCTG 120  
 GGGTGCCNGG TGGTGTGTAG AGAAAAGCTG CTTGTTTACT CCTTAAGTCA ATGTATTGGT 180  
 GACTGTTGAT TTGTTGAACA ATTCAGGAAT CAAGGGCTGT GGAGAACTC CCTCATGTTG 240  
 TTGGCAACAG GTGAATGAAC CTAGAGCGGT GACATGAAAA TAAAGCTCAC TGTACTCGC 300  
 AAA 303

SEQ ID NO:1570  
 SEQUENCE LENGTH:302  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01785

SEQUENCE DESCRIPTION:  
 GATCCCCGA CGACGTGCTC GAGTTCCTGA AGGTGTATGA GANGCACTCT GCCCAGTGAG 60  
 CACCTGCCCT GCCTGCATCC GGAGAATTGC CTCTACCTGG ACCTTTTGTG TCACACAGCA 120  
 GTACCCTGAC CTGCTGTGCA CCTTACATTC CTAGAGAGCA GAAATAAAAA GCATGACTAT 180  
 TTCCACCATC AAATGCTGTA GAATGCTTGG CACTCCCTAA CCAAATGCTG TCTCCATAAT 240  
 GCCACTGGTG TTAAGATATA TTTTGAGTGG ATGGAGGAGA AATAAACTTA TTCCTCCTTA 300  
 AA 302

SEQ ID NO:1571  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01786

SEQUENCE DESCRIPTION:  
 GATCCATTTT GCTTACACTG TTGCATCACA AGGGACTCAC CCAGGGACCA TGACCTGCTG 60  
 GTGTGTGTGT ATATTACAA AAACAAAACA AACAAACCAC CCATTGGGAT ATAAGGTAGC 120  
 AATCACAAC TAAAGACTGC GGCTTGTGGA GGTGCAATAC CCTGACTCCC AAAGTTAGTT 180  
 ACAGTGGGTT TTATTGTTTT TGTGACTGAA GGATTATTC AGACTGCTGT ACTCTTCATT 240  
 TGATGTAACA AAATGCTATT AATCTAAATA TTTGTAAATA AAGTACCTGT ATCTAGATTA 300  
 AATTAAT 307

SEQ ID NO:1572  
 SEQUENCE LENGTH:301  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01787

## SEQUENCE DESCRIPTION:

GATCCATTAC CTAGGGTAAA ATTCTCCTGA ATGTCAAACA AAGAGATAAA CTACATTGG 60  
 GTTTTGGGAA GTCCCTGTGA ATGATGAATC AAGAATCCTC AAGTCTGTCT TGCCACCCAT 120  
 TTAATACGTA TTTTGTAA GGCTGAAGTT TAGAGTTAGA ATCAGGACAT TTTGGCCTAT 180  
 TGAGAGGTTT TGAATTCAA CAGAAGATGC CATGTAAATC AGTGAATTN ATTCTTTAA 240  
 AAGCAACTTA CAAAATTAC AAGATGTATT CAATAAGCA GTTAGCTTT GGTATATCAA 300  
 A 301

SEQ ID NO:1573  
 SEQUENCE LENGTH:303  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01788

## SEQUENCE DESCRIPTION:

GATCCTCAGT GTGCTCACGG GGCTGCTGTT CGGCAGCNAT GGCTACTACG TGGCGCTGGC 60  
 CTGGACCTCA TCGGCGCTCA TGTACTTNAT TGTGCGCTCT TTGCGGACAG CAGCCCTGGG 120  
 CCCCAGACAG ATGGGGGGCC CCGTCCCCCG GNAGCGTCTC CAGCTCTACC TGA CTCTGGG 180  
 AGCTGCAGCC TTTNCAGCCC CTCATNATAT ACTGGCTGAC TTTCCACCTG GTCCGGTGAC 240  
 GTCCTNGCCC AGATGGNAAT NAGTTTTTA ATTTCATTGN AAGGATTTG AANTTCCTTG 300  
 AAA 303

SEQ ID NO:1574  
 SEQUENCE LENGTH:297  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01789

## SEQUENCE DESCRIPTION:

GATCTGTGTT CGAATCCTCC CCACCCCTTT CTTGTGGAG TTTCTAACC TGCTGCTGAA 60  
 GCACAATGTT TTGGTGCTTT CTTTCTCNN TTGTTAAAGG CAGTGTCAA AAGCCATTCC 120  
 AGATGCCAAG ACCAGGGGCT TATTTCTAGG GAAGGTAGGT CGGTTCCAT GTTCCCTCC 180  
 CGTTATTTTT ATTTTINACT TTTGCTGA GACAAGCCGA GTATGAGGTG GTTTGATTTA 240  
 AGAAAAATCA ATGAAATTGT TTA CTACTGT TTTAAATAA AACCGTAAAC TCTGAAA 297

SEQ ID NO:1575  
 SEQUENCE LENGTH:299  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01790

## SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCAGGCCG TTNCTGAGCT CAACGGGACC CAGGTGGAGT CTGTACAGCT CAAAGTCAAC 60  
 ATAGCCCGAA AACAGCCCAT GCTGGATGCC GCTACTGGCA AGTTTGTNTG GGGCTCCCTC 120  
 GCTGTCCAGA ACAGCCCTAA GGNTTGCCAC CGGGACAAGA GGACCCAGAT TGTTTACAGT 180  
 GATGACGTCT ACAAGGAAAA CCTTGTGGAT GGCTTCTAGG GAACAGNGCT GGATTCCTTG 240  
 TGCCTCATAT GCCCCAAATG CTGGTTTTC AATAANCACT TGAGGGTGA AGCTTNAAG 299

SEQ ID NO:1576

SEQUENCE LENGTH:300

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01791

SEQUENCE DESCRIPTION:

GATCCAAGAT AAAGAAGGCA TCCCCCCGA CCAGCAGAGG CTCATCTTTG CAGGCAAGCA 60  
 GCTGGAAGAT GGCCGCACTC TTTCTGACTA CAACATCCAG AAAGAGTCGA CCCTGCACCT 120  
 GGTCTCTGCGC CTGAGGNGGT GGCTGTAAAT TCTNCAGTCA TGGCATTGCG AGTGCCCACT 180  
 GATGGCATT A CTCTGACTA TAGCCATTG NCCCACTTA AGTTTAGAAA TTACAGGTTT 240  
 CAGTAATAGC TNGAACCTGT TCAAAATGTT AATANAGGTT TCGTTGNATG GGAGCATAAA 300

SEQ ID NO:1577

SEQUENCE LENGTH:295

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01792

SEQUENCE DESCRIPTION:

GATCTGGCTT CTTTCCAAG GNGGGGTGG GGTGTNCCTN GCGTCCCTGT CTTGANGGA 60  
 CCTCCTTCCC CCAGCCTCAT CACCGTGCTC TTCTCAGCGC CACCCTCAGC AGCCAGATTG 120  
 CAACACCAGG GAGAGGCGGA TGCAGAGCCC CACCGGTGGG AAAGTTGCCT GTGGAAGGGA 180  
 GCCTTTTGCT ACAATTGTA ACTTATTNC TAAAGTCTAT TTTGTAACAA TTTATTTAAG 240  
 TTTAAAAAAA GGAAACTGC TGCCCNCCAA AAAAAGAAAT TTTCAAAACA AGAAA 295

SEQ ID NO:1578

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01793

SEQUENCE DESCRIPTION:

GATCTAAAGT TCTGGCTGTC CATTAACTC CAACTATGGT CTTTATTCT TGTGGTAATA 60  
 TGATGTGCCT TTCCTTGCCT AAATCCCTC CTGGTGTGTA TCAACATTAT TTAATGTCTT 120  
 CTAATTCAGT CATTTTTTA TAAGTATGTC TATAACATT GAACTTTAAA AAATTTATT 180  
 ATTTATTCCA CTAAGTAGC AATTGACAGA TTAATAAAT GTAACATCAT AATTCTTAC 240  
 CATAACCTCA ATGNCNTNTT TTAATAAATA AAAATTAATA ATGAAAAGNG NTANAAA 297

SEQ ID NO:1579

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01794

SEQUENCE DESCRIPTION:

5 GATCTCTCTT GTCCNCTNCT GCTCTTTNCT TGGTGCTCTT TTTNCTCGGT GGGGTGTGGG 60  
 TAATAGAACA GCCGTGGGCT TTTGGGGACC TTTAACTTTT TTTNCTCTCT TTTGTTTATA 120  
 AAAAACTA AACATTCAAT TCCAGAGAAC CAAAAATCCC ACCTTCCCAC CGAACACTAC 180  
 TAAGGGGCTT GTGTTCTGCN CCATACCTTT NCTCTTTNCT TTCTGTCTTG TTAATGCTTT 240  
 10 TAAAAACAAA TGAGTTTTTT ATATAAATAA AGTTTTTAAA GTGTGTAAA 289

SEQ ID NO:1580

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01795

SEQUENCE DESCRIPTION:

20 GATCCCATCC GCATGGAGTT TGAAAATAAG GAAGACTTGT CGGGAACACA GGCAGGGCTC 60  
 AACGTCATTA AAGAGGCAGA GGCACACNCC NGGTGGGCAG CCAAGGAGCT GAGAAGANCG 120  
 AAGAAGCTTT CAGACTACGT GGGGAAGANT GAAAAANCCA AAATTATCGC CAAGNTTCAG 180  
 CAAAGGGGAC AGGGAGCTCC AGCCCGAGAG CCTATTATTA GCAGTNAGGA GCAGAAGCAG 240  
 CTGATGCTGT ACTATCACAG AAGNCANGAG GNGCTCANGA GATTGGN 287

25 SEQ ID NO:1581

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS01796

SEQUENCE DESCRIPTION:

GATCTATTGG CATATTCGGG AGCTTCTTAG AGGGATGAGG TTCTTTGAAC ACAGTGAAAA 60  
 TTTAAATTAG TAACTTTTTT GCAAGCAGTT TATTGACTGT TATTGCTAAG AAGAAGTAAG 120  
 AAAGAAAAAG CCTGTTGGCA ATCTTGTTA TTTCTTTAAG ATTTCTGGCA GTGTGGGATG 180  
 35 GATGAATGAA GTGGAATGTG AACTTTGGGC AAGTTAAATG GGACAGCCTT CCATGTTTAT 240  
 TTGCTACCT CTAACTGAA TAAAAAGCC TACAGTTTTT AGAAA 285

40 SEQ ID NO:1582

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01797

SEQUENCE DESCRIPTION:

45 GATCCTCCCC TTTTGAAATG GCCCTGCTGT GTCAGTTTCC CTGTGGCCTT TTGAACTGTA 60  
 CATCTCATAT GTTGGGAAAC GCTGGCCACT GGGAAATCAT TAGAAAGGAG GCTGTAGAAT 120  
 ATTTGCCGAG CCTCTACTGT ATACCAGGGG CTAATCACC AAGCACATTC TAGGAATTGG 180  
 GCCCTGCTCA TGAGGAGCCT TAGTGGAGAT TCCAGGTGAA TATTTATGAA AAAGTCAACA 240  
 50 TTAGAACTGA AAATGGAAAT AAAGTCTTGG AAAAGACAAA 280

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SEQ ID NO:1583

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01798

SEQUENCE DESCRIPTION:

GATCAGAATG GACTTCTNCC ACTGAGCATG ACANGCACTC GAAAGGCTAA ATCAACCAGA 60  
AACATCGAAA CAAAAGCTCA GGTGTGCCCC CCGGCACGCT CCACANCTGG TGACCCGACA 120  
GTTCCCTGGCT CCTTGTTTCAG ACAGCTTGTC AGTNAAGAAG ACANCACGTC TGCACCTNCA 180  
TTATTCAAAC TTGGCTGGCT CTCTAGTATG ACTACGNACA TGGAACACAT CTGTCTCTCC 240  
CTAAATAANT ACTACCACAT TATTNCTTCT AAA 273

SEQ ID NO:1584

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01799

SEQUENCE DESCRIPTION:

GATCCATATT TGTTTTGTGT TCTGCTTAAA TCAGCAAGAA TGATAAATTT GATGGTGTGA 60  
AATTGGAAGT ATCAAGGGCT TTCTTTGGTG ATTGAGGGAA ATAATGTCTC TACTTGTAAT 120  
TTATTGTGAC CCTTTTTCAC TGTATATGCT TTGTATGTCT AATATTTATT TCAATGCAAA 180  
TTCAATTNNC CCTTCATCTG TATTGTTATA TCTAAGATTT TATTGATGTT AAAATCTAAT 240  
TGTGGAATAA AAATCTCTCT GGAATTTAAA 270

SEQ ID NO:1585

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01800

SEQUENCE DESCRIPTION:

GATCTGCTTG ACAGTGATTA AATCCTTAGC TCACATCCAT TCCCATCTTT NGGGCTCCTT 60  
AGGCCCAAGG ATGGCATGTG ACTGGTCCTT GCAAGGTCCT TTCTTTGTCA CCAGCCAAGG 120  
CATTGATAAC CAAGTAGCCA TTTTCTCTT AAGGTTTCCT CTACAACCCC AAGGACTTTC 180  
ATGATTATCC TCAGGGACAG GATTGGAGGC ATTGAGCGTG TTTATTAACA AATTGTTTTT 240  
GGTAATAAAA TAAATGCTTG GACTCTTAAA 270

SEQ ID NO:1586

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01801

SEQUENCE DESCRIPTION:

GATCTNGTAA ACTCTCTGTA TATCTTCTTA CCTTTCAAAA TCGTTCTTAG GGTTAGTCAA 60  
GTCTGGAATA TAATTGCTGA CTATAAGTT AGCAATTATG CTTTAAAGGT GTTGTACAT 120  
CAACCTAAAG AGAACCATCT ATGGAAGGTA TGTTTGAAC ATCTGTAGGA ACACAGAACT 180

GGGATTTCAC TGAGTTTACC ANNTCAACTG TGTGAACTGT TTCTGCACTG CTTGCTAATG 240  
GCTTCATCTA ATAAATGTTT ACTTATAAA 269

5 SEQ ID NO:1587  
SEQUENCE LENGTH:267  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01802

## SEQUENCE DESCRIPTION:

10 GATCTAGGGA AGTCAACACA TAGTGTAATA TAATTACATG CCTAATGAAA AGAAGATGTC 60  
ATTCCTAAT TTNATATCT CATTTCGGC ATTTTATAA ATGTAAAAGG AAAACCTCTT 120  
GTGTTACAC AGATTGCTGA ATTGATTCT CCATATTGT TAATAATTA CTATTATTTA 180  
15 CAAAGATTCA AATGCTTTTA TGACTAATGT AAAATGAAA GAGGCTTACA TTTTAAATGT 240  
TATTAATAAT ATGTAATTAA ATCTAAA 267

20 SEQ ID NO:1588  
SEQUENCE LENGTH:288  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01803

## SEQUENCE DESCRIPTION:

25 GATCGCTTTG AGGTCAATAT TAGTGAGCTG CCTGATGAGA TAGACATCTC CTCCTACATT 60  
GAACAGACAC GGTAGAAGAC TCGCCCATTT TGGAATGTGA CCGTCTNTCC TTCAGGNGAG 120  
GACACCAGGN TGGGGGTGAA GGAGACACTA CTGCCCCCAC CCCTGACAGC CCCCACCCCA 180  
TGGCTTNCAT CTTTGCATN ACCANCACTC CTGAACCCCN ATTTCTNATT TGTCAGAATT 240  
30 TTTTNNNTA ACAAACACTAG AAATGNANCA CATGGGGTCT GTGGTAAA 288

35 SEQ ID NO:1589  
SEQUENCE LENGTH:266  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01804

## SEQUENCE DESCRIPTION:

40 GATCTTGCTT GTTTCACAAT GTAACAAGAC TCTACCTGGG TCCCCTGGTG ATGAGTTTCA 60  
GCATAGAATA ATGTTCAAGG AAAAGAAAAC GAAAACAGTT TAAATCTCTA CCACAGCCTC 120  
ACAAGCAAAT GCTAAGGGGA ACATACATGT AAAANGCCAG CAAACTATCT TCAAACCTCT 180  
CCGTCCTTAA TGTCTTCCAT GGCTATTGCC CCCACAATGG TCTCTTTNNT CCCTGCTCCC 240  
TTATTAANGA ACTCTTTCTG AAGAAA 266

45 SEQ ID NO:1590  
SEQUENCE LENGTH:266  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01805

## SEQUENCE DESCRIPTION:

GATCTATGAC TCCAACCGTA TGATTTTNTT GCCTCCCCAG TTTTCATCCC AGTGGTAACG 60  
 CCTGATTTTT GGTAGCTATG CCATCTTCTG CTGAGGATTA CCATTACTGG GTGTATCACC 120  
 CCAGTACTTC CAAATNCCTC TCCTCTATTG ATTCAGTTGT TATTGCAGTG TCTGCTTCAT 180  
 CCGTGGAAGT TGAGGCTCAG ATGCCCCCTG CTCTGTAACC CTGGGGAATG TCAGAGGCAG 240  
 GTAATAAAGG TTGTTTAAAC AATAAAA 266

SEQ ID NO:1591

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01806

SEQUENCE DESCRIPTION:

GATCAGGAGA CTTTGAATTN ATATATTTTA ATCTNATTA AGCTTAAATA GGAAAGTTTC 60  
 TTCAACAGGA TTACAGTGTA GCTACCTACA TGCTGAAAAA TATAGCCTTT AAATCATTTT 120  
 NATATTATAA CTCTGTATAA TAGAGATAAG TCCATTTTTT AAAAATGTTT TCCCCAAACC 180  
 ATAAAACCTT ATACAAGTTG TTCTAGTAAC AATACATGAG ANAGATGTCT ATGTAGCTGA 240  
 AAATAAAATG ACGTCACAGG GCAAA 265

SEQ ID NO:1592

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01807

SEQUENCE DESCRIPTION:

GATCTGAGAG AAGCCCTGTC CTCCACTCAC CTCACCCGCC GCTGCCACCA TCTCCTCTGT 60  
 GCCAACTCCT TGTGGACCGC AAGAAAGCAT GACTTTGAAA AAGGGAAGCC ATTCCGAGAT 120  
 TTTAAATGT TCATGGACTA TTCCATATTA AAAGCTGTTT TTGTTGTACA AAATTCAGTG 180  
 ATGTTTCAGT CTATTTTATT TTGCCTTCAG AAAAGAAGAA AGTCAAAAAT AAAACTTTTG 240  
 TGTATTACAG CAAA 254

SEQ ID NO:1593

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01808

SEQUENCE DESCRIPTION:

GATCCTGGAG GATTTCCTAC CCCCCTCCTC TTCGAGNCCC CAGTCGTGAT GTGGAGGAAG 60  
 AGCCACCTGC AAGATGGACA CGAGCCACAA GCTGCACTGT GAACCTGGGC ACTCCGCGCC 120  
 GATGCCACCG GCCTGTGGGT CTCTGAAGGG ACCCCCCCCC AATCGGACTG CCAAATTCTC 180  
 CGGTTTGCCC CGGGATATAA TAGAAAATTA TTTNTATGAA TAATGNAAAT AAAACACACC 240  
 TNGTGGCATG GCAAA 255

SEQ ID NO:1594

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01809

SEQUENCE DESCRIPTION:

5 GATCCATGAA GGAGGGCTGT GTGGAGAAGA TTGGGGACTG GCTGAGGAAA AATGTGCTGG 60  
 TGGTAGCTGC AGCAGCCCTN GNGAATTNCT TTTGTCGAGG TTTTGGGAAT TGTCTTTNCC 120  
 TGCTGCCTCG TGAAGAGTAT CAGAAGTGGC TACGAGGTGA TGTAGGGGTC TNGGCTCCTC 180  
 AGCCTNCTCA TCTGGGGGAG TGGAAATAGTA TCCTCCAGGT TTTTCAATTA AACGGATTAT 240  
 10 TTTTCAGNC CGAAAAGNGA TGGTCTGAGT TTNTCTTAGA AA 282

SEQ ID NO:1595

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01810

SEQUENCE DESCRIPTION:

GATCAAATAA ACCAGTGTAG GATATTAAGA CTATCAATTG GTGGGATTAG GCTTGACATT 60  
 20 TTATTTTAT AAATATATAT TTNTCCTGAA TGTGCTGAG TCCAAGAGTG GGCAAAAAAT 120  
 AATTNCTAC TTTGGACTAA TCTATAGAGG TTTTGAAAG TCTGCATTAC TAAC TTGTG 180  
 AATTCATGAT ATTCTGCCTA TGGCACAAAT TGTAACCTT TGT TTTNCTA AAATAANGTA 240  
 ATTGAAAACC TGNAAA 256

25 SEQ ID NO:1596

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS01811

SEQUENCE DESCRIPTION:

GATCTGCGCT TCCAGAGCGC ACTAATNCGG TGCTTTGCAG GAGGCAAGTG AGGCCTATCT 60  
 GGT TGGCCTT TTTGAAGACA CCAACCTGTG TGCTATCCAT GCCAAACGTG TAACAATTAT 120  
 GCCAAAAGAC ATCCAGCTAG CACGCCGCAT ACGTGGAGAA CGTGCTTAAG AATCCACTAT 180  
 35 GATGGGAAAC ATTCATTCT CAAA 204

SEQ ID NO:1597

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS01812

SEQUENCE DESCRIPTION:

GATCATTATT ATATATAGGT ATTGATTGCT ACCCTGACCA CAGTGCTTTG GACTATGAGA 60  
 45 AACTTCTTAG ATTTTATAT GTAAATNCTG TGGACCACTG GGAGCACAAT GCCCACATCA 120  
 TCTTAAGNNG AGTTTATGTG CAGCATTAA ATCACTGTGT TTTCTTGT AACTAAAACA 180  
 GACATGGGCT TTGATTTTT TCATACTATT AGACCATATC TCATAAAACC TTTTGAATTA 240  
 ATGAAA 246

50 SEQ ID NO:1598

55



SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01813

SEQUENCE DESCRIPTION:

GATCACGCAC ACACAATAAG TCTTCTCTC CGAAACCGGA AGTAAATCTA TATCTGTTAG 60  
 AAATAATGTA GCCAAAAGAA TGTAATTTG AGGATTTTTT TGCCAATAGT TTATAGAAAA 120  
 TATATGANCC AAAGTGATTT GAGTTTGTA AAATGTAAAA TAGTATGANC AAAATTTGCA 180  
 CTCTACCAGA TTTGAACATC TAGTGAGGTT CACATTCATA CTAAGTTTTC AACATTGTGT 240  
 TCTTTTIGCA TTCATTTTTT ACTTTTATTA ANGGNTCAAA CCCGN 285

SEQ ID NO:1599

SEQUENCE LENGTH:241

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01814

SEQUENCE DESCRIPTION:

GATCTAACTA TGTTTCCCC CTTTCAAGAA TAGAACTATT GGGGTGAGGA TAAGGGGTGG 60  
 GGGAGAAAAA ATCACTGTTT GTTTTTAAAA AGCAAATCTT TCTGTAAACA GAATAAAAGT 120  
 NCCTCTCCCT TCCTTCCCT CACCCCTGAC ATGTACCCCC TTNCCCTTC TGGCTGTCC 180  
 CCTGCTCTGT TGCTCTCTA AGTAACATT TATAGAAGAN NTGGAATGAA TCTCCANGAA 240  
 A 241

SEQ ID NO:1600

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01815

SEQUENCE DESCRIPTION:

GATCCAGAAT ACCCTGACCT CGCCCCAGTT CCAGCAGATG TGGAAGCGTT TGCCAAAGCC 60  
 ATGCAGACA ACGCCAAGCC CGAGCAGAAA GAGGGCGACA CGAAGGACAA GAAGGACGAA 120  
 GAGGAGGACA TGAGCCTGGA CTGAGCCACG CGCCGTCCTC CGAGGAACTG GCGGCTTGCA 180  
 GTGCGTTGCA CACCCTCACC TCCCACCCAC TGATTATTAA TAAAGTCTTT TCTTTTAAA 239

SEQ ID NO:1601

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01816

SEQUENCE DESCRIPTION:

GATCCAAAGT AATATGTAGG TTCAATATTT TGTAGGTTTT ATAATCAAAT GTCTCCCTAA 60  
 AGAGATGACA TAGGGAAGAA AAGCCTAATG TATCATCTTA ATGGATTCAG TTTTATTAT 120  
 GCACAAATAA CTGGGCTTGT AACCTAGGAA TATGATTAGA GCGTGATGCT GGCTTAAAAA 180  
 ATAGGACTNG TGAATCACAG TTTGTNNNTA ATAACTACT GGTGGAAAT ATTAAA 236

SEQ ID NO:1602

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01817

SEQUENCE DESCRIPTION:

GATCTCCCCG CCGCAGCCTC CTCAGAAGAC ATCGAGCGGT CCTGAGAGCC TCCTGGGCAC 60  
 GTTTGTCTGT GTGCTGTAAC CTGAAGTCAA ACCTTAAGAT AATGGATAAT CTTGGGCCAA 120  
 TTTATGCAGA GTCAGCCATT CCTGTTCTCT TTGCCTTGAT GTTGTGTTGT TATCATTAA 180  
 GATTTTTTTT TTTTGGNAAT NATTTTGAGT GGCAAANTAA NGATTAGCAN TAAA 235

SEQ ID NO:1603

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01818

SEQUENCE DESCRIPTION:

GATCTGCCCA GGTGCCCCAG ACTTCCTAGC ACACGTGCGC GGGAGCAGCT GCTTTGAGTG 60  
 CACACACTAC CAATCGTTCC TGGAAATACAG GGAGGTGGTG GACGGCCTGG AGAAGGCCAT 120  
 CTACAAGGGC CCAGGCAGCG AAGAGGGCCC TGAAGTCCCC CCCCAGCCCC CCTCTCGGGC 180  
 TCTCTACCC AGCCTGGTAC TGAAGGTGCC AGACGTGNTC CTGCTGACCT TCTGCGGCTC 240  
 CGGGCTGTGT CCTAAATGCA AAGCACACCT CGGCCGAGGN CTGCGNCCTG ACANGGNNAC 300  
 CTCTCTGAAC TGCAACACTT GGAN 324

SEQ ID NO:1604

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01819

SEQUENCE DESCRIPTION:

GATCAAAAAG CAAGCAGAAA TGAATCCACA TTCTAGTCCT TTATGCAGTA TACAAGGAGA 60  
 ACTGTCTGT AGGATATTCT CTTCTGATG GTGCAGAAC CAGAATTAGA AGTTTGTTGGT 120  
 TACAGCATAC TCTGTCTTC AGAAGGCGT GATTCTAGCT GTTGACCCCT TGCAGCTGTT 180  
 GGAATCTCTG CAAGAACCTC TGTATTCTC TAATAATTC CCTCTTTAT TAAA 235

SEQ ID NO:1605

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01820

SEQUENCE DESCRIPTION:

GATCCCAACA ATGAAGCCAT TCGAAATGCT ATGGGCTCCC TGGCCTCCNA GGCCACCAAG 60  
 GACGGCAAGA AGGACAAGAA GGAGGAAGAC AAGAAGTGAG ACTGGAGGGA AAGGGTAGCT 120  
 GAGTCTGCTT AGGGGACTGC ATGGNAAGCA CGGAATATAG GGTAGATGT GTGTNATCTG 180  
 TAACCATTAC AGCCTAAATA AAGCTTGGA ACTTTTTTCC CTTTTTGT TCAA 235

SEQ ID NO:1606

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01821

SEQUENCE DESCRIPTION:

GATCAAAAAG AGAGTGGTTG TGGAACTGT TGGCCAGTT GGTTCAGC CAGAGACATT 60  
CAGAAAAGTTT TTAGCTCTAT ATTTGCATGG TGCTGCGTGA NGGAGGACCC CTCTGAATCC 120  
TGAAACCCCT CTTGCCCTCTC TTCCACGGAA GAGGGCCTGG GCCCGGTGGA GCCTCAGTGC 180  
CCGTTTGCC TGCTGCTCTC GCTGACAATA AAGAGCCCTT GCGTTGCACT GAAA 234

SEQ ID NO:1607

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01822

SEQUENCE DESCRIPTION:

GATCTGGAAC CTCAGCCTGG CCAGACACAG GCCCTCCCTG TCCCCAGAG AAAGGGGAGC 60  
CCACTGTCCT GGGCCTGCAG AATTGGGTT CTGCCTGCCA GCTGCACTGA TGCTGCCCT 120  
CATCTCTCTG CCCAACCCCTT CCCTCACCTT GGCACCAGAC ACCCAGGACT TATTTAACT 180  
CTGTTGCAAG TGCAATAAAT CTGACCCAGT GCCCCCACTG ACCAGAACTA GAAA 234

SEQ ID NO:1608

SEQUENCE LENGTH:356

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01823

SEQUENCE DESCRIPTION:

GATCACATAA AACAGATTG CATAAAATTA CCATGATTGC TTTATGTTTA TATTTAACTT 60  
GTATTTTGT ACAAACAAGA TTGTGTAAGA TATATTTGAA GTTTCAGTGA TTAAACAGTC 120  
TTTCCAACCTT TTCATGATTT TNATGAGCAC AGACTTTCAA GAAAATACTT GAAAATAAAT 180  
TACATTGCCT TTTGTCCATT AATCAGCAAA TAAAACATGG CCTTAACAAA GTTGTGTTGT 240  
TTATTGTACA ATTTGAAAAT TATGTCGGGA CATACCCTAT AGAATTACTA ACCTTACTGC 300  
CCCTTGTA GAATGTATTA ATCATTCTAC ATTAAAGAAA ATAATGGGTT CTAAAA 356

SEQ ID NO:1609

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01824

SEQUENCE DESCRIPTION:

GATCACCTAT GCCAAGAAAT AACATTGGG ATAGTCGTCT TAAAAGACT TGGTGTATT 60  
TACAGTGTGTT GTTTTGATAA CATTGGCTG GGTCAATTTA ATAGTTAGAG ATGAGGAGGA 120  
GTAAAAGTGA AATTTTGTG AAGGACTTAA ATTATCCAGT GTTCTTTAG CCTTGGTGAA 180

CTATGAAATA CGAAGNCCTT AATTTTGTAC AATAAACTTT TATTTGTAAA 230

5 SEQ ID NO:1610  
SEQUENCE LENGTH:227  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01825

10 SEQUENCE DESCRIPTION:  
GATCTGTTGA ATATTTGCTA AAGACCAGTT CTTTAAGCTA AGACATGTAA AAAATCCCAA 60  
ATGGCAGTAC CTCATTGTTT ACTTAGCTTT TGTACTTATA TTTTCAGAG GAAAAACAC 120  
TACTGTAAT TGTGAATAGC CAATACATAA CTGTATTGTA TGCAATCTG TGATTGTTGG 180  
15 CAGTGTCATC TCTGAGAAAC AGATAAATAA AGTTTATTTA CTATAAA 227

SEQ ID NO:1611  
SEQUENCE LENGTH:234  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear  
CLONE:HUMGS01826

SEQUENCE DESCRIPTION:  
GATCTAGCCA AGGCTGGTCT GCAGTATCAG ATGTCCAAAC TCATCTACTA TTAGCCATAT 60  
25 TTTGTGAGTC GTTTGTCTAA ACTTTGTCAA AAATGCCTTT GCCATGATTT TGTGCTATC 120  
TGGATTTCAA ACATGGACAG TTAGGAAGAT GTGCATTGAA GTAGGAAAT TTTGTTTACA 180  
TTTGCTGTGA TTTATTTTTT AAATTAATAA TGGAAATGTA TTTTAAAGTT TAAA 234

SEQ ID NO:1612  
30 SEQUENCE LENGTH:226  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS01827

35 SEQUENCE DESCRIPTION:  
GATCTGTTGG GTTCTCTATT AATTTATTTT ATACATTATA GATTCTGGGT TGATAAATTC 60  
TGCTCAATTT GAAAAATTTT ATATTTTGTG TCAAATCTGT TACAATTTAT ATTGGTGGGN 120  
GCAAAAGTAA TTGCGGTTTT TGCCGTAGAC AGTAATGGCA AAAACTGACA ATTGCTTTTG 180  
40 CACCACCCTA ATAATATTAA NTATAATCAT GACTTTAAAC ATCAAA 226

SEQ ID NO:1613  
SEQUENCE LENGTH:224  
SEQUENCE TYPE:nucleic acid  
45 TOPOLOGY:linear  
CLONE:HUMGS01828

SEQUENCE DESCRIPTION:  
GATCGGGAAC TGGCTCCGTT GTGCTGAGGT CATCTTTGGT CATCAGCCTC CAGCATNTGG 60  
AAACACCTCC AACGCAATGT GGCTTTTACA TTTCTTTCTT TCTTTCTTTT TTTTTCCTGG 120  
50 TACTGGGAAT ACACAACACC AGCTGTTTAA TTATTATTG GGGAGGGGGT TGTGATTTTA 180  
TTATTNGTTT TTTTAAATG AAAAATAAAA NGTTATATAT TAAA 224

55

SEQ ID NO:1614

SEQUENCE LENGTH:222

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01829

SEQUENCE DESCRIPTION:

GATCAGCAGA TACATGTCAG TGCAGAGGTT CTCTGCCCTC CAGAAGCCCT CGTCTGGGAA 60  
 TTCGAGAGAG GAGGAGGACC CAGGGCCAAA GGAATCCTCA AACTTCCCTC CAAGGGAGAT 120  
 ATTGTAAGGG GAAAACAAAG TGTTTATTC CCCAAAACAA CCCAGCTCA CCCCATGTCC 180  
 CTTCTACAG CTTACTACT GAGGGTGAGT GGAACGNTA AA 222

SEQ ID NO:1615

SEQUENCE LENGTH:222

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01830

SEQUENCE DESCRIPTION:

GATCAGAATA TGTATGCAGT TCTTTCTTTA ACCCTTTTTT CTCCTATGTA CTGTGAACAT 60  
 TTA AAAAGTA CTTTAAATA TTCTTTGGAA ACTTAGCTTT TAGTAACTAC TTGGTTGTAT 120  
 CATAATTNAT TAACTANTGN NTTATTGGTA AACATTGGCT TGCCTCCCAT GACTTGCCAT 180  
 TATAATTAAA ACTGTGACTA CTATCTGTCT CCATTNCATA AA 222

SEQ ID NO:1616

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01831

SEQUENCE DESCRIPTION:

GATCCCN TTC CCACCCTCTC TGTTGGCCTC AGAGTCACTC CTGCCCCCTC TCCCTGACTT 60  
 GGTGCTCACA TGCACCTCAC TAGGGTTTGT GACCAGGGTC TGGATGAGCT TGAATTGAA 120  
 TGAATTGAGT TTGTATTNT AGAACCTGG GTTTTACAT GTTTGGTCTT TTTTNGTTTT 180  
 GGT TTGTCAC CNTCGATAAA GGAAGTATAT TCATCCAAA 219

SEQ ID NO:1617

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01832

SEQUENCE DESCRIPTION:

GATCGCGGCG GANTNGGCC CGCCGCCTGG TACTCAAGCC CGCGGGGACA TTGGGAAGGG 60  
 GACCCCGGCC CCTGCCCTC CCTCTCTGC ACCGTACTGT GGAAGAGAAA CACGCACTTA 120  
 GTCTCTAAAG AGTTATTTT AAGACGTGTT TGTGTTTGTN TGTGTTGTN CTTTNNATTG 180  
 AATCTATTTA AGTAAAAAAA AAAATTGGTT CTTTATTAAA 220

SEQ ID NO:1618

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01833

SEQUENCE DESCRIPTION:

GATCANGGCA CTCAACTCA TTTGGAAAAT NTGAACACTG ATGACATGGT ATAGGAGTGG 60  
 GNGGGGTGTT GAGCCACCCA TCANACCCTC TTTAGCTGTG CAAGATAAAA GCAGCCTGGG 120  
 TCACCCAGGG CCACAAGGCC ATGGTTAATT NTTANCGGCA AGGCAAATCC ATNGTTGNGA 180  
 AGTGCANTGG GCATAGTAAA NGTGCATGAT TTTAAN 216

SEQ ID NO:1619

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01834

SEQUENCE DESCRIPTION:

GATCATAGAA AATAAATAGA AGAGACAGTG AAGCAAGTAA AAAGAAAAGC ATTGTTTTAA 60  
 TTTGTTTGCA TTAATTTTTT TCATTTGTCA AAATGCTTCT TTTGTTGCCA CAGTAAAGAA 120  
 CAGTTTTTAT TGTTTTGTA GTAAAATTAC GTAGCTGATT TTGTATGTAA AGATTAAATT 180  
 CCATAATAAA AATTATTGTA TGTTTACTGT GAAA 214

SEQ ID NO:1620

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01835

SEQUENCE DESCRIPTION:

GATCAGAGTG GCCCAGACAG ATTGCTTTCT TATCACCTAT CATGTGAATT CTACCTGTAT 60  
 TCCTGGGCTG GACCACTTGA TAACTCCAG TGTCTGGCA GCTTTTGAA TNACAGCAGT 120  
 GGTATGGGGT TTATNATGCT ATAAAACAAT GTCTGAAAAG TTGCCTAGAA TATATTTTGT 180  
 TACAAACTTG AAATAAACCA AATTGATGT TAAA 214

SEQ ID NO:1621

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01836

SEQUENCE DESCRIPTION:

GATCTGTGTC ATAAGTGACT CCGGATGCAT CAGTGTCCAC CAGTTGGAAG CAATGACAAG 60  
 GATGGCTGGC TGGTGTTTTT CAGCCTTCCG GTTATAGAC TGTATTATC TAGTGGATTC 120  
 CTGCAGGCC CATACTGAGC CTGGACTGAA AGTATCCACT CGGACCATCT GTTATCTCTC 180  
 TACACTGAAA ATAAAACCTC TTCCACCCAA A 211

SEQ ID NO:1622

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01837

SEQUENCE DESCRIPTION:

GATCTGAGAT GGAAGAGTTT CATCCCAAAA CCATCTCCCC CTGACCCCCA GTCCATGGAA 60  
AAATTGTCTT CCACAAAACC GGTCCCTGGT GCCAAAAAGG TTGGGGAAC TCTGGTCGGT 120  
ACAAAAGTAA TTGTGGTTTT TGCACNGTTG GAATTGTCA TNTGATATTG GAATACATTC 180  
TTAAATAAAT GTGGTTATGT TATACATCAA A 211

SEQ ID NO:1623

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01838

SEQUENCE DESCRIPTION:

GATCAGCGAG GTTCTCCAGG ACCTTAGGTT TGATGCGGAA TCTGCCGAGT GATGGCGGCT 60  
CCCCAGGGAT GCCGCCGAGG GAGATGGGAA ACGGGGCGGA TGGCGCCAG CCCAGCCCTA 120  
ACTGCCAGCT GGCTGGGGTC GCGCCCCACT GCGCTGCTGA CCTTCTGCA GTTCCAGACA 180  
CCTCCACAA TAAAGAGCTC CTCCTCTGTA AA 212

SEQ ID NO:1624

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01839

SEQUENCE DESCRIPTION:

GATCTATGAC AATGTATAGT CAATAAATGA TAGCAATTAT TTTTAATTAT CAAAATAAAT 60  
TGTTAGAGAT TCAAGTTAGC ATACAAAATG GAAATACATT GACAATCTAA AAACATACT 120  
AAACATAAAA CTCAAGACTT TATTCCTCTT CCTGTTCTAT CAAAATTGTG CCAAGTAAAA 180  
AANTAAAANT TGTTCTTTTT ATTTCAAA 208

SEQ ID NO:1625

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01840

SEQUENCE DESCRIPTION:

GATCTAGATG GCAGATAGGA ACTTNTTGT CACAAAAATA CTGGAGGAAA ATNTTGTA 60  
AATAGACTTT TGGACACACA GCTGTTGGGG CTGCACTGAG CTGCAATTTT TAACATGGAT 120  
TTATAACTTA ATGTTTCTGT TTATAAATA CTAATGATTT GCAATGTATT TTAAGGCA 180  
ATTAAACAG ATGTTTATT CTTTCTGAAA 210

SEQ ID NO:1626

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01841

SEQUENCE DESCRIPTION:

GATCCAGGAT TCTGGGAGGC TTCAGTTACC GCTGGCCGAG CTGAAGAACT GGGTATGAGG 60  
CTGGGNCGGG GCTGGAGGTG GCGCCCCCTG GTGGGACAAC AAAGAGGACA CCATTTTCC 120  
AGAGCTGCAG AGAGCACCTG GTGGGAGGA AGAAGTGTA CTCACCAGCC TCTGCTCTTA 180  
TCTTTGTAAT AAATGTAAA GCCAGAAA 208

SEQ ID NO:1627

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01842

SEQUENCE DESCRIPTION:

GATCTCACAG CCACGAATTT AGAACTTCCT CCTATAGCAT TTTCTATCTT TTTTATGGCA 60  
TTTATTTTAT TCTATCTTGT TATGATTACA TAATCTGTTT AATCCCCAAT TATATATTGT 120  
AAATACCTTG AAGGAAAGGA GTCTTTATTA TCTTTGGTGC CTGGTGTITA GTTTTAATAT 180  
TTTATTAAT ACATCCAAGG AAA 203

SEQ ID NO:1628

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01843

SEQUENCE DESCRIPTION:

GATCCACTGT TCAATCTGCA CAAGATTNGG GNNCCAGACA TGGGAGACTT CAGCTGCCTC 60  
AGAGGACCGT GGACAGGGAA GGCAGCCTCG CATCCCTCTG TCCATGCCTG GNNTGACTTT 120  
AATAACCAAG AGTTTTATTT TTGAATTTGT AGCTGTCGTT CACTTTTAC CCACCCATTC 180  
AATAAACCTT ACAGAATTGC AAA 203

SEQ ID NO:1629

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01844

SEQUENCE DESCRIPTION:

GATCCAAGTA ACAGTGACTG CAGTTAGGGT CGAGAGCTTC TCCGAAGCAG CGGTATGCA 60  
GGCTTTTGTG TGGCTGACGC TTCCCTTTT CACAACAGTA AAAAGCTATC AATGGGAAAT 120  
TGTGGACTTT TCCCAACAGG GACTCAATGG GGAATCAATG TGCAATATTC AGTCAACATA 180  
AAACTCTTA AGAACTCCAA A 201

SEQ ID NO:1630

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS01845

SEQUENCE DESCRIPTION:

5 GATCACAGAC CACGAGTGCC TTTCCCGGAC CTGGACGTTG CCTCCAGAGC AGGCACCANC 60  
 TCTTTCCCTC TCTAGACAGA AATATTTTGG TAAGGTTCTG GGCAGGGAG GGAGCATGAA 120  
 GTACGAGGAA AACTTGAATT CCAGATTTN AATGCAAAGT ATTTATCATT TCTACCAGAA 180  
 ATAAACGTTT TAAGTTTAA A 201

10

SEQ ID NO:1631

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS01846

SEQUENCE DESCRIPTION:

GATCTTGAGG TCACTTCGTT TAGGTCATTN TCTCAACCCA ACCTCCCCAA ACTCTGTTT 60  
 GAGCCAATAT GTGTTCTATT GTTCTCAGAG CACCAGCCGA CTGTACAACA ATTGTTATAA 120  
 AAATGTTTAT TGTTTACCAA AACCAAGTGA CCTCTTATCA AATGCTGCTT GGTAACAAA 180  
 20 TCTATCACAG TTTTAATAAA AAGAAAAAAA AAGGAAA 217

SEQ ID NO:1632

SEQUENCE LENGTH:200

25

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01847

SEQUENCE DESCRIPTION:

30 GATCTGTTTT NNTAAACAC TAACAGAATA ATTCTTTATA AATAGGTAAG CCTTACACTT 60  
 GTTAAAGAAA TTTACCTCTA ATTTCACTCT CACTAATGTA AAATACTGGG ACTTAAGTAT 120  
 ACAATTCAGT CACTAATGT ACAGTTTAT GTGGGGAACA ATTCATGCAG GCTACTGGAA 180  
 AATTAATCT TATTACAAA 200

35

SEQ ID NO:1633

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01848

SEQUENCE DESCRIPTION:

GATCCNGGGC ATTNCTCTG GGGAGACAGG CCTGAGGCCA GTCGGNAGC CAAGCAGATT 60  
 CCAAACCACT ACAACCCTTG CCAAACACAG CCCACTCCAT TTANACCGC CTCCTGAGG 120  
 AGAAAATGCA GACTCAGGT TCCAGTAACC AGTGATGGAT TCACCCCATC TCCCAAATAA 180  
 45 TGGTTTACTT GTTTACAAA 200

SEQ ID NO:1634

SEQUENCE LENGTH:333

50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS01849

SEQUENCE DESCRIPTION:

5 GATCTTCTAA GAATTTTGCA AAATTCTAAA CAAATATAGA GATGGTATAT AGAATTCATA 60  
 TCTAGAAAAC TTTGATTTTA ATGTGAGCTT ATCAAATTG TNCTGGCTTT TTTGGCACTA 120  
 AGGCAAAAAC ATGTTAACCA GAAATAATTT ATTCTTCATG TATGTAAAAT ATTTGAGAAT 180  
 GTTTAGCCTT TTATTAGAAT TTTATTGGA AAATATTTAT CTTTCTACAC ATTTTACACT 240  
 TATGTNCCTT TGCTTATAAC CCAATTTCTT AACTTTTTTG TTAAGTAAAG AAATATCAAT 300  
 10 NATGTTTTAT TATCTAATAA AGTGTAAAGAT TCN 333

SEQ ID NO:1635

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01850

SEQUENCE DESCRIPTION:

20 GATCGAATGG CTTTTTGCAG CTAAGTACTA TGTGTAGACA GGTTTTATAT TATAAAGTAT 60  
 GCATTCTTAT CACCTAGTAT ATAGTTAGTT TGTAGAGTGA TTTCCCCCA GTTCTTGAA 120  
 CATGTTATCT TCACATCTTG GACCTTGGTC AGTTGTGCTA TTCATTATTA AACACTAAAA 180  
 CTTTGGCGGT TCTTGCAA 199

SEQ ID NO:1636

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01851

SEQUENCE DESCRIPTION:

30 GATCTGGATG TTGAAAAGAG TCTGGCACCT CCTCCNTCTC TCTTGCTCAC ACTCTCACCA 60  
 CGTGATATGC TGCCTCCTCC TGTGCCCTCC ACCATGAGTA NAAGCTTCCT TANNCTCTTN 120  
 TNAGAAGCAG ATGCTGGCAG CATGATTCTT GTACAGTCTG CAGAACAGTG AGCCAAATAA 180  
 ACCTCTTTTC TCTAAA 196

SEQ ID NO:1637

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01852

SEQUENCE DESCRIPTION:

45 GATCCAAGTA TTTCTNCATC AAGCAGTTTT TAAAAGGAAA ACGATAATAA TCAGTAGGCT 60  
 CCATGGAAGC CTTTNCCTTA ATAGCTATGT GCCAAATACT TTATCTNGT GTGACAGTCA 120  
 TGTCAGAGTG AAATCTCTCA GGAAAAGTGT AACTAGTAGT TACAAAGTAA ATAAAGGATT 180  
 TCATTTTAAG GTGAAA 196

SEQ ID NO:1638

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01853

SEQUENCE DESCRIPTION:

GATCCTCCTG CAGGGCTAGG CGGATTGTTT TGGATTTCCT TTTGTTTTTC CTTTATAGTT 60  
TCCATCTTTT CCCTCCCTGG TGCTCATTGG AATCTGAGTA GAGTCTGGGG GAGGGTCCCC 120  
ACCTTCCTGT ACCTCCTCCC CACAGCTTGC TTTTGTGTA CCGTCTTCA ATAAAAAGAA 180  
GCTGTTTGGT CTAAA 195

SEQ ID NO:1639

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01854

SEQUENCE DESCRIPTION:

GATCTTAGCT TTGATAAATG ACTGANGCTG GAGAAGCCGT GGTGAAGTC AGCCTACACT 60  
ACAGTGCACA GTTGAGGAGC CAGAGACTTC TTAATCATC CTAGAACCG TGACCATAGC 120  
AGTATATATT TCCCTCTTGG AACAAAAAAC TATTTTCCT GTATTTTAC CATATAAAGT 180  
ATTAAAAAAA CAAA 194

SEQ ID NO:1640

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01855

SEQUENCE DESCRIPTION:

GATCTGAGTA ATTAGCAGGT ATGATGCTGG GACTGGAAAA TAGAAAGTAA TAACTAAAGG 60  
GTTAATGTGC AACGTTAATT TTGGCCCTTG TTCATAAATT TATGTTTTCA GTGGCNTGTG 120  
TACATATAGA ATTGTTAAAG TTGTCATTTC CAATATTTAT ATTAGAAAAA TTATTTAGAT 180  
ACTTTATAAT TTAAACCGGC ATTTTAAATA ATGACACTTG CATTATTGT ATTGTAATAA 240  
ATTTCACTTT TAACTTTAAA AGTTTAAA 268

SEQ ID NO:1641

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01856

SEQUENCE DESCRIPTION:

GATCTCTGCT CAGAGAAGTG CAGGGGGAGC CTTCCAGCTC ACTCTCCCTG AGGACTGGCT 60  
TGACAGGGGC TATGGGTTTG CTTTGGTGT TTTTAAAAA AAAGAAAAATA TATTTTTTTG 120  
AAAAACGAC TGCCCATCCC GGGTCCTTC CCTGATGGGT TGGGGCAGTT ACCTGGTTGC 180  
TGTTTTAATT AAA 193

SEQ ID NO:1642

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01857

SEQUENCE DESCRIPTION:

5 GATCACATCA CTCCACCCCT GCCAGGCCCC AGGTAGGAA TAGTGGTGGG AGGAAGGGGA 60  
 AAGGGCTGGG CCTCACCCT CCCAGCAACT GAAAGGACAA CACTATCTGG AGCCACCCAC 120  
 TGAAAGGGCT GCAGGCATGG GCTGTACCCA AGCTGATTTC TCATCTGGTC AATAAAGCTG 180  
 TTTAGACCAG AAA 193

10 SEQ ID NO:1643

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15 CLONE:HUMGS01858

SEQUENCE DESCRIPTION:

20 GATCCTTAGT ACAACATGTG AAAGAAGATA TGTGTCTTT ACTCACAGTG GAGGCATTTT 60  
 TCTAGCTGTG TTTGATTGG CTTCCCTATA GATTCAGGAC CCATAACTCT TGTTCTCACT 120  
 CATCTGCTAT GCTGCTGATA AGGACTTTCA GGTCAACAGC TGTAAGTCT AAATGAAGTT 180  
 AATACTCTGG AAA 193

SEQ ID NO:1644

SEQUENCE LENGTH:192

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01859

SEQUENCE DESCRIPTION:

30 GATCTAGGCA AACCTTTATA AAGTTGCAGT ACCTAATCTG TTATCCAC TTCTCTGTTA 60  
 TTTTGTGTG TCTTTTAA TATATAATAT ATATCAAGAT TTTCAAATTA TTTAGAAGCA 120  
 GATTTCCTG TAGAAAACT AATTTNCTG CCTTTACCA AAAATAAACT CTGGGGGAA 180  
 GAAAAGTGGA AA 192

35 SEQ ID NO:1645

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS01860

SEQUENCE DESCRIPTION:

45 GATCTGTCTG TTGCTTGTTT AATATATTTT TTTTATGACA TTAATAAAG TTTAAAGGG 60  
 TTTTATATCC ACTGTCAATT TCAATTGGAT AACATTTTGT CAAGNTTTT TTTTCTGAT 120  
 TATTTGATGC TAGCTGGAAT TCAAGAAATG GCATTGACCT TATTCAAATA AAGAAATATT 180  
 TTAGTAAA 188

SEQ ID NO:1646

SEQUENCE LENGTH:190

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01861

SEQUENCE DESCRIPTION:

GATCAAAAC TAATTTGGGA TATGTATGGG TAGGGTAAAT CAGTAAGAGG TGTTATTTGG 60  
 AACCTTGT TTGACAGTTT ACCAGTTGCC TTTATCCCA AAGTTGTTGT AACCTGCTGT 120  
 GATACGATGC TTCAAGAGAA AATGCGGTTA TAAAAATGG TTCAGAATTA AACTTTTAAT 180  
 TCATTGAAA 190

SEQ ID NO:1647

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01862

SEQUENCE DESCRIPTION:

GATCAGTTGG GTGCTATGTG CTCAGCTTTC CTAAGTCAGC TTCATTTAAT GCAGAGTGGT 60  
 GTTTGAATTT GGCTTAGATG GGCTGGCAGG CATGATTTTA AAAAATGTAA TCATCAGTAA 120  
 GAAGTACTTC CATGTTAAAG ATGCAAAAAA AAAAGTCTTC ATTAAAAATT CTATTTAANG 180  
 AAA 183

SEQ ID NO:1648

SEQUENCE LENGTH:361

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01863

SEQUENCE DESCRIPTION:

GATCCAAACA AATACACATT CTGNTTTTA GCTCAGTGTT TTCTAAAAA AGAACTGCC 60  
 ACACAGCAAA AAATTGTTTA CTTTGTGGA CAAACCAAT CAGTTCTCAA AAAATNACCG 120  
 GTGCTTATAA AAAGTTATAA ATATCGAGTA GCTCTAAAC AAACCACCTG ACCAAGAGGG 180  
 AAGTGAGCTT GTGCTTAGTA TTTACATTGG ATGCCAGTTT TGTAATCACT GACTTATGTG 240  
 CAACTGGTG CAGAAATTCT ATAACTCTT TGCTGTTTT GATACCTGCT TTTNGTTCA 300  
 TTTTGTTTT TTTTGTAATA ATGGTAAANC TTCAGAAAT AAAATGTCAG TGTGNNTAA 360  
 A 361

SEQ ID NO:1649

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01864

SEQUENCE DESCRIPTION:

GATCAGGACC TGGGGCCTA CAGTTCTGCC AGGAAGTGCC TGGCCAAACA GAGGCAGAGG 60  
 ATGCTGCAAG AGAGAAAAGC TGCAAAANAG GCCGCCGCTG CCACCTCCTG AGGCAGNTGT 120  
 GGGTGCCCT GCTGTGTGGC TCTGTATGAC TGTGCTGAA ATATAAGCC CTGCAACCTG 180  
 AAA 183

SEQ ID NO:1650

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01865

SEQUENCE DESCRIPTION:

GATCTCAGCA CAAGCAGGGG AGCAGCTGGG GGAACACAGC TTTATGTAAT TACCTCTGTT 60  
CAATATTTAG CAAGTTGCAT TGTAACATTG TAACTGTTTG TTTCTCCTTG GATGATGAGC 120  
TACCCCAAG AAGGGGTCAT ATCAGATTGG GTCTCATTAA AATGTCTGAT GAATGAAA 178

SEQ ID NO:1651

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01866

SEQUENCE DESCRIPTION:

GATCTATGGC TTAATAAATT TGTTCCTGTG ACAATNTTTG TAAATCTAGC CAATAGAGTC 60  
ATTTACAGAA GAAAAATNAG CATGTAATAA TACAAGAACT GTTCCCCCT CAAAACCTGA 120  
ACCTGAATTA TTTGTAATAA CTGAAATTA ATGATTAAAG AGAAGCCAGA ATTGTAAA 178

SEQ ID NO:1652

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01867

SEQUENCE DESCRIPTION:

GATCTGGAGC TAATAATGAC TGAGATGGAG ATATCTCGAG CAGCAGCAGA ACGCAGTTTG 60  
CGGGAACACA TGGGCAACGT GGTAGAGGCG CTTATTGCCC TAACCAACTG ATGCGTGCTT 120  
TCTCAAAATAT ACCTACTGGA TTAATTTATG GCAATAAAAT TTTTTTTTGT CTTTTTCAGT 180  
TTTATCAAA 189

SEQ ID NO:1653

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01868

SEQUENCE DESCRIPTION:

GATCTCTGCT CTGCCCTCTC CCAGATTGGT GGGGAGGGAG GGCAGGAGGT AGATATAGGC 60  
CTGTCCTTTT TAGCAATGTG ATTCTTGTG TTGATTCTCT CTCTGGAGTT CATGTGCTGC 120  
CTCANNNGAC TCTGATTTTA TATTNAGAA AAATAAAGGC GTTCAATCTG CAAA 174

SEQ ID NO:1654

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01869

SEQUENCE DESCRIPTION:

GATCAGGCTC ATCTCATCTG CACCAACTGC TCTACCTGTT AGATGGAGAC CTGCGTCAT 60  
 GAATTTCTCG AAATGCTCCT GGAACCTATT TATATGCCTC AAAATCCTCT AAACCTATT 120  
 ATAGTAACCC ATAGTTTTAA TTTTATAAAT AAACGTATTT ATTAAATCTT AAA 173

SEQ ID NO:1655

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01870

SEQUENCE DESCRIPTION:

GATCTCTAAT TTAAAGAAAC AGTTTTTATA TACCTAGAAT GAAGATTCTG TTAAAGCGG 60  
 TTTTGGTTAA CTGGTTCTT GACATTTGCC TAAATNTTN TTGGATTGGG ACTAAATGT 120  
 NCTATTAGCC AATGAATAAC GTCCAAGTAA ATTTNTGTTT TATTTGGGA AA 172

SEQ ID NO:1656

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01871

SEQUENCE DESCRIPTION:

GATCTCAAAG GAGTCTGAAA TATCATATTT CTGTGTGTGT CTCTCTCAGC CCCTGCCCAG 60  
 GCTAGAGGGA AACAGTACT GATAATCGAA AACTGCTGTT TGTGGCAGGA ACCCTGGCT 120  
 GTGCAATAA ATGGGGCTGA GGCCCTGTG TGATATTGAA AGGTAAGAA A 171

SEQ ID NO:1657

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01872

SEQUENCE DESCRIPTION:

GATCGNCATT ATCCCCAGNA AAAAGCTCCG CAACAAGATA GCAGNTAATG TCACGCATCT 60  
 GATGAAGCGA ATTCAGAGAG GCCCAGTAAG AGGTATCTCC ATCAAGCTGA NCGAGGAGGA 120  
 GAGAGAAAGG AGAGACAATT ATGTTCTGA GGTCTCAGCC TTGNNCCNN N 171

SEQ ID NO:1658

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01873

SEQUENCE DESCRIPTION:

GATCAAAGAC ATCCTCATCC AGTATGACCG GACCNCTGG TAGCTGACCC TCGTCGNTGC 60  
 GAGTCCAAA AGTTNGGAGT CCTGTGCCC AGTTCGTACC AGAATCCACC GTAAGCCATC 120  
 GGNCTAAAAC TTACTTNATA ATAACAGTTT TGAGGGATT AAAAGTTCAA A 171

SEQ ID NO:1659

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01874

SEQUENCE DESCRIPTION:

GATCAAAAAT CCAAGGAGAA TGGTGCCAGT GTATGATAAA ATCCATGTAG TGATGAGGAA 60  
TGGTGTTAAA TAATGTAATA TATAANANTC ATGATATANG ANTGTTTGAA GGTGATGCAT 120  
GTTTGATTTT NGTAGTATAA NTGTATTNA GTTCAAATGA TGTATAANGN 170

SEQ ID NO:1660

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01875

SEQUENCE DESCRIPTION:

GATCCTCGCT CCGTTGCACG GCGGCCNTAA GTTATTGGAC TATCTAATAT CTATGTATTT 60  
ATNTCGCTGG TTCTTTGTAG TCACATATTT AATAGTCTTA ATATCTTGTT TTTGCATCAC 120  
TGTGCCCAT GCAAATAAAT CACTTGGCCA GTTGCTTTT CTACAAA 167

SEQ ID NO:1661

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01876

SEQUENCE DESCRIPTION:

GATCTGGGCG ATTCTGAAGC CATGCCATTT TTAACCTTAT GTCTGCTAGA AAGTGTGTA 60  
GTTGATTGAC CAAACCAGTT CATAAGGGGA ATTTTTTTTA AAAACAACA AAAAAAAAC 120  
CATCCAAGN NGGGTTTNTG ATTAATTTT GTGGNGTTAC CAGTAAA 167

SEQ ID NO:1662

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01877

SEQUENCE DESCRIPTION:

GATCTTCCCC AAGAGGGAAT GGGGTTTCTG GGGTCCATTC TCTGAGTCAG TGGTTATTTG 60  
AAAATTGAT TTTGATTTTA TTTTCTCT GTAAACTTCC AAGCTGGCTT TTCCCATTC 120  
AATTCCTGTG ATTTATGCCA ATAAAGTTTG CCCATGATT TCAAA 165

SEQ ID NO:1663

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01878

SEQUENCE DESCRIPTION:



GATCCCTNCC TTGGTGGGCA GTTCTGCCTT CCAAGGAAGA AGGGGAAGAA AAGGACCTGT 60  
GGGTGGCTCA GGNCNAAGCA GACCCCGGGC TCCACCCAG CCCCNCAG GNTGCTGCCA 120  
GTNCACATT TTACAAATT AATATAAAGC AAGTCCAGTN TAAA 165

5  
SEQ ID NO:1664  
SEQUENCE LENGTH:161  
SEQUENCE TYPE:nucleic acid  
10  
TOPOLOGY:linear  
CLONE:HUMGS01880

SEQUENCE DESCRIPTION:  
GATCAGGCTG CTGAGGGAAT AAATTTAATC AAGGTCTTTG CAAAAACAGA AGCACAGAAG 60  
GGAGCCTATA TAGAACTAAC ACTGCAGACT TATCAAGAAG CACTCAGTCG CCATTCTGCA 120  
15  
GCTTCCTAAA AATATTTTAA AAATACATTT ATTTTACTAA A 161

SEQ ID NO:1665  
SEQUENCE LENGTH:158  
SEQUENCE TYPE:nucleic acid  
20  
TOPOLOGY:linear  
CLONE:HUMGS01881

SEQUENCE DESCRIPTION:  
GATCAGTCCA TCCCAGAGGG ACCGGAGTTA TGACAAGCTT TCCAAATATT TTGCTTTATC 60  
25  
AGCCGATATC AACACTTGTA TCTGGCCTCT GTGCCCCAGC AGTGCCTTGT GCAATGTGAA 120  
TGTGCGCGTC TCTGCTAAAC CACCATTFTA TTGGAAA 158

SEQ ID NO:1666  
SEQUENCE LENGTH:158  
SEQUENCE TYPE:nucleic acid  
30  
TOPOLOGY:linear  
CLONE:HUMGS01882

SEQUENCE DESCRIPTION:  
GATCGTGTAT TGAGATTTCT TAAATAATGC TTCAGATATT ATTGCTTIAT TGCTTTTTTG 60  
35  
TATTGGTTAA AACTGTACAT TAAAAATTGC TATGTTACTA TTTTNTACAA TTAATAGTTT 120  
GTCTATTTTA AAATAAATTA GTTGTTAAGA GTCTTAAA 158

SEQ ID NO:1667  
SEQUENCE LENGTH:155  
SEQUENCE TYPE:nucleic acid  
40  
TOPOLOGY:linear  
CLONE:HUMGS01883

SEQUENCE DESCRIPTION:  
GATCTTTGTT AGTTGCATAT TATATTTCAG TGTTTATCTT CTTGGTGAAT TGACCCTTTT 60  
45  
ATCATTATGT AATTCCTTA TATTATATC TTTATATTTA ANATAGGTTT CCTTAACATT 120  
TGAGAAGTAA AANTAAAATA AAATGTAATA GCAA 155

50  
SEQ ID NO:1668

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01884

SEQUENCE DESCRIPTION:

GATCACTCTG GGCTCACTTG CCTGCCTAAT GGTCATCTCC CCAGTAGACT GTAAGCTCCT 60  
 TGAGGGCAAG GATTGTGTTG GAATTTTGT ATTAACAGTG CCTGGCTTGG TGCCTGGCAC 120  
 CTAGAAAGCA CTCAATAAAT GTTGTTTAA TGAAG 155

SEQ ID NO:1669

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01885

SEQUENCE DESCRIPTION:

GATCAGATGC TTGAAATTTA ACACTTTTCA CTTGGTTCTT ATACTGAATG CCGACTCTGC 60  
 TCTGTGTTAG AGATATGAAA TGGTGTGTTGA TACTGTTTGA GACATTATGG AGAGATTTAA 120  
 TTATTGTAA TAAANGNTTT GCTGCAGTCT GAAAACTGAA A 161

SEQ ID NO:1670

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01886

SEQUENCE DESCRIPTION:

GATCTATTGT AATGTGTTAT TTNGGCTGAN GTATGTNAAG AAAATACTAC CTTACAAAGN 60  
 TATGTATTNT CAAAAGGAAA TACATATCAG AAAGTTTAAC AGGGCCAGTG GGTGATACTG 120  
 AAGTTGTCGG GATGGATGGT GTCTATCTGG NNN 153

SEQ ID NO:1671

SEQUENCE LENGTH:444

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01887

SEQUENCE DESCRIPTION:

GATCTAGAAG TTTTACTTTT ATAAAGATGG TGTCCGGAAG ATGTTGCTAA TGTATTTTAC 60  
 TTCAACATAG GGAACAAACT TTTTAAGTAT ATTAATAAAC CTGTATGGTT AGTTTTTAAC 120  
 AGTTTTTTAA AATAAACTAT GGATATGACA AATATTCTGT GTTTTACTAA GTGCTTGGAT 180  
 AGGCTTTCTA ATTTNGTATA CGTGCTAGAG TTAATTATTG ANCATTTTAA TCCAAATTAA 240  
 GTTGTAACCT TGTTTATACT ACTGATTGCT CATTCTTTAA AATGATATTN TNNNGTAAAA 300  
 GTCATAACCA ACATATGANC AGACAGATTT ATGTCTTTAA ACACAGATTG TNAGCTATAG 360  
 GTTTAATCTG ATACCAGTTG CTGGAAGGTT GCCATTTGGT TTTTCTNAAA ACCTATACCN 420  
 CTAAAACTTT CTTTNAAGGT TAAA 444

SEQ ID NO:1672

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01888

SEQUENCE DESCRIPTION:

GATCAGCAGC CCTCGCAATG TGCTCAGCGA GTACCAGCAG AGGCCGCAGC GGCTGGTGAG 60  
CTACTTCATC AAGAAGAACT GAGCAAGGCC TGAGCGCTGC CTGAACTCCG AAGNCCTGTG 120  
TGATGCTTTC CATTAAAAAN NATTTGCCAA A 151

SEQ ID NO:1673

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01889

SEQUENCE DESCRIPTION:

GATCCAGATG ATAAACCAGT GAACTATGTC AAAAGCACTC TCAATATTAC ATTTGACAAA 60  
AAGTTTTGTA CTTTNCACAT AGCTTGTTCG CCCGTAAAAG GGTTAACAGC ACAATTTTTT 120  
AAAAATAAAT TAAGANGTAT TTATNGGAAA 150

SEQ ID NO:1674

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01890

SEQUENCE DESCRIPTION:

GATCCGNC CG TCTCTGCCTT CCAAAGTGCT GGGATTACAG GCGTGAGCAC ATCTGCCCGG 60  
CTTATTTTTT TTTATGTTTT TNCCTCGTAA GAGGTTCTGT TGAGCAGTGA TTTGCAACTC 120  
TTGCTGACGT TGCTGGGGAA GCTTTAAA 148

SEQ ID NO:1675

SEQUENCE LENGTH:568

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01891

SEQUENCE DESCRIPTION:

GATCTACCCC AGGGAGAATC TGAGACATCT TGCCTACTTT TCTTTATTAG CTTTCTCCTC 60  
ATTCAATTCT TTTATACCTT TCCTTTTGG GGAGTTGTIA TGCCATGATT TTTGGTATTT 120  
ATGTAAAAGG ATTATTACTA ATTCTATTTT TCTATGTTTA TTCTAGTTAA GGAATGTTG 180  
AGGGCAAGCC ACCAAATTAC CTAGGCTGAG GTTAGAGAGA TTGGCCAGCA AAAACTGTGG 240  
GAAGATGAAC TTTGTCATTA TGATTTTCATT ATCACATGAT TATAGAAGGC TGTCTTAGTG 300  
CAAAAACAT ACTTACATTT CAGACATATC CAAAGGGAAT ACTCACATTT TGTTAAGAAG 360  
TTGAACTATG ACTGGAGTAA ACCATGTATT CCCTTATCTT TTAATTTTTT TCTGTGACAT 420  
TTATGGTCTC ATGTAATTTG CATTACTCTG GTGGATTGTN CTAGTACTGT ATTGGGCTTC 480  
TCGGTAATAG GTTATTTCCA TATACTATAA TTGGNAATAT TTTTGTACCA ATGGTTATAA 540  
CNCTAGGGGT NTAAAAACCA GGTTCGTN 568

SEQ ID NO:1676

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01892

SEQUENCE DESCRIPTION:

GATCTCTAAG GTATTATGTT TGCCTTCTCT TAGTTATTTT TGGGTTGTCA CAAAGCTCAG 60  
TATCATGGTT TGACAGAAGC AGTTATGTGA ACTTTTATGT TAGGACATTA CTAAATAAAG 120  
AATTCCTTAG CTGCTTATAA AGTAAA 146

SEQ ID NO:1677

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01893

SEQUENCE DESCRIPTION:

GATCCATTCT CCNTTANTT CCCCCACCCT CCTCTCTNGG ATATGGTTGG NTTTGGCTCA 60  
TTTCACAATC AGCCCAAGGC TGGGAAAGCT GGAATGGGAT GGAACCCCT CCGCCGTGCA 120  
TCTNAATTTN AGGGGTCATG CNCN 144

SEQ ID NO:1678

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01895

SEQUENCE DESCRIPTION:

GATCGAGATG AGCTTTAAAA ACTTGAAAAA CAGTTTGTA GCTTTCAAC AGCAGCATCA 60  
ACCTACGTGG TGGAAATAGT AAACCTATAT TTTCATAATT CTATGTGTAT TTTTATTTTG 120  
AATAAACAGA AAGAAATTTT GGGTTTTTAA A 151

SEQ ID NO:1679

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01896

SEQUENCE DESCRIPTION:

GATCTTGATG GTCGCTGCAG AGTAACTTCA GCGCTGAGTT CGTTTGAAAC CTCGGTTTG 60  
TTAAGATTCA GAATAACCAA TTGCTTTGTC TGTTAAATCT CCCGATTCT GTTAGGAAAA 120  
TAAAAGCCTC ATTTCTTAAA 140

SEQ ID NO:1680

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01897

SEQUENCE DESCRIPTION:

GATCACTATG TAGGCAATGC TGGATACTGG NCTGTTATTT ACACATTGT ATCACCTTTT 60  
ATTTCATAAG ATAGCATTGT CAGANTAATT TAGTATTTC AATAATCAA CAAGTAAAT 120  
AAAATTAATG AGAATGAAA 139

SEQ ID NO:1681

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01898

SEQUENCE DESCRIPTION:

GATCTCCACA TTCAGGTTTC CTGATGCACT TTNCGACTCT TTGGGCAACC TCTGGACTCC 60  
TTGTNCCCAG GGTCCACATT TAGTTTTATC TTTACTGCAT TGCTTTTATG AAAAAGAATA 120  
AAATTGGATG AAACAGAAA 139

SEQ ID NO:1682

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01899

SEQUENCE DESCRIPTION:

GATCAGTTAA TTTGTATGTA GCAGTGTATG CTCTCATATA CAATNACTGA CCTATGCTCT 60  
AAAACATGAA TGCTTTGTTA CAGACCCAAG CTGTCCATT CTGTGATGGG TTTTGAATAA 120  
AGTATCCCT GTCTAAATG AAA 143

SEQ ID NO:1683

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01900

SEQUENCE DESCRIPTION:

GATCGAATCA CCTGAATGTT CTATGTANTG TAAAATATTC TTTCTTGCT TTCTTGTTT 60  
AAGGTATATA TTCTATTTGT ATGGAATTCT TATTCAAATA CAGTTCTATT AAAGAGTATA 120  
CTCCTATTGG ATGAAA 136

SEQ ID NO:1684

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01901

SEQUENCE DESCRIPTION:

GATCTCAGCG GCATTAAAGCT GTGCCTGAGC GAGTTTGTAG TGACTCACTG CACAGCACCN 60  
CCAGACTAGC ATGTGGTTCT ATATTTGTAA AGTTATTGGG ATAAGAAACA ATTAACAGT 120  
TTGTAGTAAA CACAAA 136

SEQ ID NO:1685

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01902

SEQUENCE DESCRIPTION:

GATCTTCTAC TTCCCTNTGG GGAGGGGAGT GACAGGTCCA CACACCACAC TGGGTCACCC 60  
TGTCTGGAT GCCTCTGAAG AGAGGGACAG ACCGTCAGAA ACTGGAGAGT TTCTATTAAA 120  
GGTCATTTAA ACCAAA 136

SEQ ID NO:1686

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01903

SEQUENCE DESCRIPTION:

GATCTTTAAA AAAATTTTCC ATATGTCAAA GTGTAGAGAT GTTTCTAGCA GCATTATCT 60  
TGTCTCTAT AGATTGAACA AAAAGTGGTA GCTGTNAAAT TGTGATTAT AATAAATACA 120  
TATTGGTCT TCAAA 135

SEQ ID NO:1687

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01904

SEQUENCE DESCRIPTION:

GATCAGCAGT TCCAGCCCT ACGCTNGCTG GGGGCGCAAC CACCCCTTCC TTAGGTTGAT 60  
GTGCTGGNA AAGCTCCCTC CCCCTCCTC CCAAGAGAG GAAATAAAG CCACCTTCGC 120  
CCTAGGGCCA AGAAA 135

SEQ ID NO:1688

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01905

SEQUENCE DESCRIPTION:

GATCTTCATC TGTAGCCAAG AAGAGAGCAT TAAACCCAAG ANCATTGTGG AGAAGATTGA 60  
CTTTGACAGT GTGTCCAGCA TCATGGCCTC CTCCAGTAA CTTCAGGTGT TTAATAAAGA 120  
TGTGTTGACT CAGAAA 136

SEQ ID NO:1689

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS01906

SEQUENCE DESCRIPTION:

GATCTTAATG TTTCAAAGGA GTGCAGCCCT TCACAGCCAT CAGATATGAG GGCAGTGTTC 60  
TGTCTGGTGT TGTAGCCATC TCAAGAACAA ATCAACAGCA ACAAAGAGA AAGAATAAAT 120  
TTTAAAT TAAA 134

SEQ ID NO:1690

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01907

SEQUENCE DESCRIPTION:

GATCTGTGAC CCTGGGCGCT GAAATGGGA CCCAGGAATC CCCCCGTCA ATATCTTGGC 60  
CTCAGATGGC TCCCAAGGT CATTATATC TCGTTTGAG CTCATATCTT ATAATAACAC 120  
AAAGTAGCCA CAAA 134

SEQ ID NO:1691

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01908

SEQUENCE DESCRIPTION:

GATCTCTACT ACCACAAGGA AAATAGTTTA GGAGAAACCA GCTTTTACTG TTTTNAAAA 60  
ATTACAGCTT CACCCTGTCA AGTTAACAAG GAATGCCTGT GCCAATAAAA GGTTCCTCCA 120  
ACTGAAGTC TAAA 134

SEQ ID NO:1692

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01909

SEQUENCE DESCRIPTION:

GATCAGTGTG GAGGACCCGC CCCAGCGCAC GGCCGGCGTC AAGGTGGAGA CCACTGAGGA 60  
CCTGGTGGCC AAGCTGAAGG AGATTGGGCG GATTGAGCC CCTCCAGAG ATGGCAATAA 120  
AATGACTCT CAACATCAAA 140

SEQ ID NO:1693

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01910

SEQUENCE DESCRIPTION:

GATCTAACCT TTGANGCTTT AAAAAAGGAG AAAGAGGGTA GGGGTGGGAA ACTGGCATAAC 60  
TGTGTGTATA GCACTGCCGA TTGGCTAGGC CACTGTGTCT CTGCTACAAA TTAAAGAAAT 120  
CCTAAAAGTT AAA 133

SEQ ID NO:1694

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01911

SEQUENCE DESCRIPTION:

GATCGCGAAT AAAAATCAAC AAATGTGAAA GCCCAGAAAA ATATATTCGT ATTCTGGTT 60  
TTGCTGGATT TTTACATTTT TATATAATAA AAATGNTATT TTGAAATAAA GATTATGCTG 120  
ACTCAAATGC AAA 133

SEQ ID NO:1695

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01912

SEQUENCE DESCRIPTION:

GATCTATTGC AGATATTTGA TGTAGTTTC TCTTTTAAAT TAATCAGAAA CCCCACTTCC 60  
ATTGTATTGT CTGACACATG CTCTCAATAT ATAATAAATG GGAAATGTCG ATTTCAATA 120  
ATAGACTTAA A 131

SEQ ID NO:1696

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01913

SEQUENCE DESCRIPTION:

GATCCGCCCC GCTCAGCAGA ATTCAGGCTC CTGTATGCCT CAGCCCCCTCG ATATAACTCC 60  
ATCGGATTCT AGCAGCCTGG TATTCTAGCA ATAAAACCCA AGGCCTGAGA AACAGGGGCC 120  
ATCCTGCAAA 130

SEQ ID NO:1697

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01914

SEQUENCE DESCRIPTION:

GATCAGACTG TCACTTTATA GTTTTTCTAT ATAAAGATTA TATAGTTGCA AACAAAGGTT 60  
GTGAAATTC CCTTTTGTG TTTTNNACTT TTAATTAATA AAAGTACATT GTTTCATAG 120  
CAAACCTAAA 130

SEQ ID NO:1698

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear



CLONE:HUMGS01915

SEQUENCE DESCRIPTION:

GATCGAAGCT ACCGTAATGT GTTCTTGAGG TCAACATGTT TTGTGGAAGT CACTGTATTT 60  
 GCGCCNTTAT GTCAATTACC TATTATAAAC CGAGAGAAAT GGGAAAATTA AAAACCTGTT 120  
 TTGAATTAAA 130

SEQ ID NO:1699

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01916

SEQUENCE DESCRIPTION:

GATCCCTTGT AAACATGAAA TCATTCCATG GATGGCTGCC TTATAATTTT GTCTCTTTCC 60  
 ACTTTAATTG TGAATGGTTA AAAAAATGCT GTTTCTGAT ATTAATTTT TATTAGTGCA 120  
 TACCTTAAA 129

SEQ ID NO:1700

SEQUENCE LENGTH:82

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01917

SEQUENCE DESCRIPTION:

GATCTGTACC TAGTACCCCT CCCATCTACT GATTGTTTG TTTTGTAAAC CAAACACATT 60  
 TTCAGATAGA AGGAGCCTTA AA 82

SEQ ID NO:1701

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01918

SEQUENCE DESCRIPTION:

GATCCCTTAT TCCCTCCACA ATAACAGAAA CACTCCCAGG GACTCTGGGG AGAGGCTGAG 60  
 GACAAATACC TGCTGTCACT CCAGAGGACA TTTTTTTTAG CAATAAAATT GAGTGTCAAC 120  
 TATTTAAA 128

SEQ ID NO:1702

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01919

SEQUENCE DESCRIPTION:

GATCTACAAT NAAGCCCTCA AGGCTGAAA ATAAATAGGG AAGATGGAGA CACCCTCTGG 60  
 GGGTCCTCTC TGAGTCAAAT CCAGTGGTGG GTAATTGTAC AATAAATTTT TTTGGTCAA 120  
 ATTTAAAAAA AAATAAA 137

SEQ ID NO:1703

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01920

SEQUENCE DESCRIPTION:

GATCTGAGGA GGAAATGTGA CGCCGGACGC TTCNTGTNT TTGACCTTTT NAAAGGANGA 60

GGAAGTTCAC CGACANTACC CATCACCCAC AAAAGTCTCA CTTCTTGAA GATTGTGTT 120

AGGCTGNN 128

SEQ ID NO:1704

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01921

SEQUENCE DESCRIPTION:

GATCTGGCGT NCTACTATGA GGCTTCTTTT GACCTCATTN NTGTGGTNGC CGGCGTAGCC 60

AGACCATCCT ATACTGTGAC TACTTCTACT NGTACATTAC AAAAGTACTC AAGGGAAAGA 120

AGCTCNN 127

SEQ ID NO:1705

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01922

SEQUENCE DESCRIPTION:

GATCATAGCT AACTGTATG TTTAGGTGGT GTGAAATNAT TTATAATCAC AGCTTGAAC 60

GTGTTTGCTT GGTACTGTCA TAGTGATTAC AAATTCATG GAATGCGAAG AGCAACAATA 120

AATAAAAAAT ACCACTCACC CTCAAA 146

SEQ ID NO:1706

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01923

SEQUENCE DESCRIPTION:

GATCAAAAAG GACTGAACCC CCACTATCAT AATCCATACA TTCATTCCA TGTTGTTTGA 60

CTAGCAGTGC ATATATGAAT GAATATGGTA ATTAATCTTA CCTATAAGAA CCAAATACTT 120

TAATTATATT AAGATAGTGA ATAAAGATGT ATAATATTTT NATTAATACC TTGAATATAT 180

TCAGTGGATT GAATGTGACT TCATAACTGT ACTACGATTG TATTAATAAATA TTTCTGGAAA 240

SEQ ID NO:1707

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01924

SEQUENCE DESCRIPTION:

5 GATCTTATGA AGGAAGATTT GTGACCCTAC GTATATATAT ACACACACAT ACATATATAT 60  
ATATATCCCG AACCAACANC GGGACTTTGT TTATATTGCA AATAAATATT ATTTTTCCTT 120  
TAAA 124

SEQ ID NO:1708

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01925

SEQUENCE DESCRIPTION:

10  
15 GATCCCTTT CTCTATGTCG GGACACTCAT TAGCAAGAAC TTTNCTGCTC TACTNGAGGN 60  
ACATGACATT TTTGTTCCAG AGGATGATGA TGATGATGAC TAACAGGAAT TACAGAANGN 120  
NGAN 124

SEQ ID NO:1709

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01926

SEQUENCE DESCRIPTION:

20  
25 GATCCGAGCA GTCCTCTGCC CGCCTCCCGT GAAGAAGAGG AAGAGAAAAT GCCTGCTGTT 60  
GTAAATGTCT CAGCCCTCTG TTCTTGCTCC TGTCCTTGG AACCTTTGTA CGCTTTGCTC 120  
AAAAAAAAAC AAAAAAAAAA AACAAA 146

SEQ ID NO:1710

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01927

SEQUENCE DESCRIPTION:

30  
35 GATCCTGTGT AGAAGCTGTT CTCATTAAAC ACCAAACAGT TAAGTCCATT CTCTGGTACT 60  
AGCTACAAAT TCGGTTTCAT ATTCTACTTA ACAATTTAAA TAACTGAAA TATTTCTAAA 120

SEQ ID NO:1711

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01928

SEQUENCE DESCRIPTION:

40  
45 GATCTGCGCC TCTCAGTGCC TTTTGAGGGG TTCCCATCAT CCCTCCCTGA TATTGTATTG 60  
AAAATATTAT GCACACTGTT CATGCTTCTA CTAATCAATA AACGCTTTAT TTAAGCCAA 120  
A 121

SEQ ID NO:1712

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01929

SEQUENCE DESCRIPTION:

GATCGGGGCA AGAGAAGGCT GAGTACGGAT GGGAACTAT TGTGCACAAG TCTTTCAGA 60  
GGAGTTTCTT AATNAGATAT TTGTATTTAT TTCCAGACCA ATAAATTGT AACTTTGCAG 120  
CGAAA 125

SEQ ID NO:1713

SEQUENCE LENGTH:338

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01930

SEQUENCE DESCRIPTION:

GATCAGCCCA TCTCAGCTTG CTGTTTCAAT CACAATGGAA ACATATTTC ATACGCTTCC 60  
AGCTACGACT GGTCAAAGGG ACATGAATTT NATAATCCCC AGAAAAAAN TTACATTTC 120  
CTGCGTAATG CAGCCGAAGA GCTAAAGCCC AGGAATAAGA AGTAGTGGCT GGAGACTCTG 180  
GCTCAGCCAG AGTTGTTTCT CTCCANTCTG CCTCATCTCT GTACGANTTT GGGTCCCAGC 240  
CTTGTGGGT TGTCAAGCAT GGACATGGAT TTCAACCCCT GGAGAAAACG NTGTCATTGT 300  
TCAGCAGCTG AGNGCCCCAG GCGTCCGNGG CGNCTTTN 338

SEQ ID NO:1714

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01931

SEQUENCE DESCRIPTION:

GATCCCATAT CTATTACCGT GTCCATAGGA ATAATAGGTA AGGGCTCTGT CTCTGTCAAG 60  
CCATGTAACA AAGGACACTG TTAAG 85

SEQ ID NO:1715

SEQUENCE LENGTH:260

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01932

SEQUENCE DESCRIPTION:

GATCCAGCCC TGGTTCTGGC TGTGGTCAGC AGATGCCAGT NAAGGGTTTT GTGTGTTTAG 60  
GCCTCATTTC TTTGTCTTTT TCCTACTCCG TTCTGGCAT TTGCTGATT CTAGTGATA 120  
CTCTGTAGTC TCAGTTCGTG TTGATTCCA TTCCATGGAA ATAAAAAGTA TGTGTACAT 180  
ACTGCCGAAG AATTGTCTTG CAAGTNAAGG CTCCCCCTT TACTATAAGA CTATAAATAA 240  
AANCTTATTT NATCCNNAAG 260

SEQ ID NO:1716

SEQUENCE LENGTH:430

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01933

SEQUENCE DESCRIPTION:

GATCTTGTGC TGTGCTATCC GCAGAACCGC GAGATGGTCT AGAGTCAGCT TACATCCCTG 60  
 AGCAGGAAAG TTTACCCATG AAGATTGGTG GGATTTTGTG TTTGTTTGTG TTGNTTTGTT 120  
 TGTGTTTGTG TGTGTTGTTT TTTGCCACTA ATTTTAGTAT TCATTCTGCA TTGCTAGATA 180  
 AAAGCTGAAG TTACTTTATG TTTGCTTTT AATGCTTCAT TCAATATTGA CATTGTAGT 240  
 TGAGCGGGGG GTTTGGTTTG CTTGGTTTA TATTTTNCA GTTGTGTTGTT TTTGCTTGTN 300  
 ATATTAAGCA GAAATCCTGC AATGAAAGGT ACTATATTG CTAGACTCTA GACAAGATAT 360  
 TGTACATAAA AGAATTTTT TNCTTTAAA TAGATACAAA TGTCTANCAC CTTAATCAA 420  
 GTTGACCTN 430

SEQ ID NO:1717

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01934

SEQUENCE DESCRIPTION:

GATCGAGCCA CTGCGCTCCG GCCTGGGTGA CAGGAGACTC CATCTCAAAA AATAAAATTA 60  
 AAAAAAAC TACTACAATA AATTATCACC TTGGACTGTA TAAACAAC TTNAAACTAG 120  
 TCTTTNAAA AAGTACACTT AAATAAAAT CTAANCATAA GNGANTGTAA A 171

SEQ ID NO:1718

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01935

SEQUENCE DESCRIPTION:

GATCGCTCAG AAAATGGGAA CCCAGGGCAA ATTGTATGTG CTCCTTACTG GGTATTAT 60  
 AAGTGTACACA TGTTTTTAT AATAAACAT AGGTGATTTC ACCTTAATGG ACAA 115

SEQ ID NO:1719

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01936

SEQUENCE DESCRIPTION:

GATCCTCCA CCTCAGCCTC CTGAGTAGCT GGGACCATAG GCTCACAACA CCACACCTGG 60  
 CAAATTTGAT TTTTTTTTT TTTCCAGAGA NGGGGTTTG NANCATTGCC CAGNN 115

SEQ ID NO:1720

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01937

SEQUENCE DESCRIPTION:

5 GATCTAGCAC TTTACAAAGT AAGTTTTTCT GTNACTTAGA GCTGAAAATA AAAGCAATGT 60  
AGAGTTACGC TTTTATAAGT ATTTNANGTT TCANAAATNA TGCATACAGC AATTN 115

SEQ ID NO:1721

10 SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01938

SEQUENCE DESCRIPTION:

15 GATCATTAG TTCTATCTAT TTAGAAATAT GTAAACTGG ATTTTTTTTT AAGTAATATG 60  
TGACCAAAGT TAATTTTGTG CCAAAGGTCT AAATAAGAG CAGTTTCCCA TAAA 114

SEQ ID NO:1722

20 SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01939

SEQUENCE DESCRIPTION:

25 GATCGCCACA GCCCTTCTTG GAAGAAAGGC GTCTGTGTTT CAGGTTCCAC GCGAGTCACC 60  
TCTTCGTCT TAATGTTTAC CGTCCACAGC TTTGGAATAA ACCATCCTGG GAAGTTAAA 119

SEQ ID NO:1723

30 SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01940

SEQUENCE DESCRIPTION:

35 GATCTTTGAC TGTATCATGC ATTGTACAAT TGATTTCATA TTTTATGAAA TGCCTTAATT 60  
TTCCTACTAT AACATAAAGA CAATGATGAA TAAAGTTTAT GTGTATGATT AAA 113

SEQ ID NO:1724

40 SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01941

SEQUENCE DESCRIPTION:

45 GATCAGAAAC ATACATACCC TNCCTAGGGA TTTAGAAAGT GGGTTGGCAG TCTTTCCTCA 60  
CGTCCATCAC GCANTTGGNA CCTACTNCAG TGTATTGTAA ACTTTTTTCT CNN 113

SEQ ID NO:1725

50 SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS01943

SEQUENCE DESCRIPTION:

5 GATCCCAGAG GTCANGACCA AANCCAATCA GTGAAAATTC AACTNTAGCT GTGAAAACAT 60  
TGCATAACA GGAGCTATCC AACAAATGGAC CAGAATGTTG ACAATAAAGT N 111

SEQ ID NO:1726

SEQUENCE LENGTH:113

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01944

SEQUENCE DESCRIPTION:

15 GATCCCGCAG GTGGCACGTG ACAGCTAGGG TTCAAAACGT TCTCACAAA TCCAATGCTC 60  
CTCACATATT AATTTTATAA CCAGACAAAT AAATATTAGA GACAACCACC AAA 113

SEQ ID NO:1727

SEQUENCE LENGTH:109

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01945

SEQUENCE DESCRIPTION:

25 GATCTCAAAA TTCCAGAATT CCCTGTACAT CTNTCCACGT GCTTGTGCTC CAGGTGTGAC 60  
TTGTAAACTG TCTAGTGTTT GCNTTAAATA AAATGGCACC GAGCATAAA 109

SEQ ID NO:1728

SEQUENCE LENGTH:329

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01946

SEQUENCE DESCRIPTION:

35 GATCCGTATC GGTTTAAGAA GCGGACGGAG CTGTTTATTG CCGCCGAGGG CATTACACG 60  
GGCCAGTTTG TGTATTGCGG CAAGAAGGCC CAGCTCAACA TTGGCAATTT GCTCCCTGTG 120  
GGCACCATGC CTGAGGGTAC AATCGTGTGC TGCCTGGAGG AGAAGCCTGG AGACCGTGGN 180  
AAGCTGGCCC GGGCATCAGG GAACTATGCC ACCGTTATCT CCNACAACCC TGAGACCANG 240  
ANGACCCGTG TGNAGNTGCC CTCCGANTCC AAGANGGTTA TNTCCTNAGN CATCAGNGCT 300  
40 GTGGTTGGTG TGGTGGCTGG NGNTNGNCN 329

SEQ ID NO:1729

SEQUENCE LENGTH:109

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01947

SEQUENCE DESCRIPTION:

50 GATCTGTCAA TTTCTTTGTN CAGAATGATT TGAAGTATTG TATTCAGTTT ACATGCATTA 60  
TTGNTTATA ATNAATATCT AATGAAATA CATGTTGTTA TATTGTAAA 109

55

SEQ ID NO:1730

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01948

SEQUENCE DESCRIPTION:

GATCAGCTGA TGGAGCTCCT GATTTGACAA AGGAGCTTNC CTCCTTTGAA TGACCTAGAG 60  
CACAGGGAGG AACTTGTCCA GTAGTTTGA ATTGTGTTCT TCGTAAAGAC TGAGGCAAGC 120  
AAGTGCTGTG AAATAACATC ATCTTAGTCC CTTGGTGTGT GGGNNNTTGT TTTTTTTTTT 180  
ATATTTTGAG AATAAACTT CATATAAAAT TGAAA 215

SEQ ID NO:1731

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01949

SEQUENCE DESCRIPTION:

GATCGCACCG CCCCTGCGAG AGAGTGTATC ANCTGTTTTA TTTTGTAAA AACAAAGTGC 60  
TAAATAATAT TNATNACTTG GTTTGTTTNC AAAANCGGAT TAAATGN 107

SEQ ID NO:1732

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01950

SEQUENCE DESCRIPTION:

GATCACTGTG GTNTTCATAT TTCTAAAATA AATGAATTAA AAANTTTAAN GNCTTAGATG 60  
CTTATCTCTA TCATAGCTCA GAATGCAACT NCAATACCCC CATTCTN 107

SEQ ID NO:1733

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01951

SEQUENCE DESCRIPTION:

GATCAACTGT ACGCCTTTGG TATCTGACCA TAAAGTCTTT TGCTCCGCTG ACATTTGGGT 60  
GATGTCTTCA CATGGAAATA TAATAAAAT AAAATCTAG TTAAAA 106

SEQ ID NO:1734

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01952

SEQUENCE DESCRIPTION:



GATCGAGGCT TCAGTGAGAT ATGGCTGAGA CACTGCTCTC AGCCTGGATG ACAGAGTGAG 60  
AACCTGTCTC AAACAAGAGA AAAAAATAAA TCAAANNCTA TTCAA 106

5 SEQ ID NO:1735

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10 CLONE:HUMGS01953

SEQUENCE DESCRIPTION:

GATCTGAGGA GGCTTCGTGG GCTTTTGGGT CCTCTAACTA GGACTCCCTC ATTCCTAGAA 60

ATTTAACCTT AATGAAATCC CTAATAAAAC TCAGTGCTGT GTTATTTGTG CCTCATTTC 120

CCAGGAATAG TCACTGCCTT GAGGAACCAA A 151

15 SEQ ID NO:1736

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS01954

SEQUENCE DESCRIPTION:

GATCCACCCA CCTNAGGCCT CCCAAAGTGC TGGGANNACA GNCGTGANAA CCACGGCTTC 60

GCCAACAATG GATTTTAAA TTATTCCAC GCTCACAAAA AACCTN 106

25 SEQ ID NO:1737

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS01955

SEQUENCE DESCRIPTION:

GATCNCNCCT CAACACCTAG TGCAATTCTT TTTACACATT AGGNACTTAG TAATTNGGGT 60

TGAATTGTGT TGAACCTAACC TGGCGGTATA GGCAAAANTT GGAAGN 106

35 SEQ ID NO:1738

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS01956

SEQUENCE DESCRIPTION:

GATCTCCCAT TTCTAGGAAC CCCAGTCTG CTTCTCCGCA ATGGCACATG CTTCCACTCC 60

ATCCATACTG GCATCCTCAA ATAAACAGAT ATGTATACAT ATAAA 105

45 SEQ ID NO:1739

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

50 TOPOLOGY:linear

CLONE:HUMGS01957

## SEQUENCE DESCRIPTION:

GATCCAAGAG ATATATTGG CAACTTTTTC TAGAAAAGGC ACATTGGGTA TAATTCATTA 60  
 CATTCTTGAG TTTTTTGGG TTTTTTTTTT TTTTTTNGNG NNANN 105

5

SEQ ID NO:1740

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS01958

## SEQUENCE DESCRIPTION:

GATCCAGCTG GAAAGCTGAA GTATTTCGAT AAAGTGAATT GAGAAATACT TCTTCAAGTT 60  
 ATGATGCTTG AAAGTTCTCA ATAAAGTTCA CGGTTTCATT ACCNAAA 107

15

SEQ ID NO:1741

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01959

## SEQUENCE DESCRIPTION:

GATCTTAAGG TATCAGTATT TCAGAATCCT GCGACGATT TATTCTAAA TTCATGTACT 60  
 GTATGTCAT AAGTGAAAAT AAAATNTCAT ATTCTTTCT ATNATTGGTA TCATTCAA 119

25

SEQ ID NO:1742

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01960

## SEQUENCE DESCRIPTION:

GATCCTTAGC TCTTTGCTCT ATGGCCCTTC CTCATCAGGG GACCGTTTCC CCCCTCTTCC 60  
 TTCACAGTAT TTAAGAAATA AAAGTCGGAT TTNCTGGCT GCTTCTCTC TAAA 114

35

SEQ ID NO:1743

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01961

## SEQUENCE DESCRIPTION:

GATCGCCCCA TTGCACTNCA ANCTGGACAG CAAGAGCAAA ACTCCGTNTC AAAAAACAAA 60  
 AACAAAAANCA AACAAAAAAN TTCCCTGAG AGAAAACCTA TN 102

45

SEQ ID NO:1744

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS01962

55

## SEQUENCE DESCRIPTION:

GATCACACAC TAAGAGAACG TTGATTGCCT CGGCTATTGT GCTGGCTGGA CACTTTGGTC 60  
 ACTTTTGAAG CATGTTAATA AATGTCACGTG ATTAAACAA A 101

5  
 SEQ ID NO:1745

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

10  
 TOPOLOGY:linear

CLONE:HUMGS01963

## SEQUENCE DESCRIPTION:

GATCCAAGTT TGAAAACAAT TTTAGGCTAC TAGATATGAA CAACATCTTG ATTATGTAGT 60  
 TGAAGGAAAT TAAAGATGAA TGGTTAATT AAAAATTAAA 100

15  
 SEQ ID NO:1746

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

20  
 TOPOLOGY:linear

CLONE:HUMGS01964

## SEQUENCE DESCRIPTION:

GATCAAATTA AATAATTCAA GCCCTGCCTT CAAATGAAA TTTTTTTTTT AGTATTATTT 60  
 AGCAAAANCA ATAAACCCA AATTTTTTTA ACCATCAAA 99

25  
 SEQ ID NO:1747

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

30  
 TOPOLOGY:linear

CLONE:HUMGS01965

## SEQUENCE DESCRIPTION:

GATCACTTCA AGCAAGCCCC CATGATGGTT CTCAGTCCTG CTTCTCTGTG GGTACGTGCC 60  
 CCTCTGTTTA AAAATAAACT GAATATGGAT GTTTAAA 97

35  
 SEQ ID NO:1748

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

40  
 TOPOLOGY:linear

CLONE:HUMGS01966

## SEQUENCE DESCRIPTION:

GATCAAAATG AAAACCTGTT GATGTGAATT CAGTTATTGA ACTTGTTACT TGTTTTGGC 60  
 AGAAATGTTA TTAATAAATG TCAATGTGGG AGATAATAAA 100

45  
 SEQ ID NO:1749

SEQUENCE LENGTH:95

SEQUENCE TYPE:nucleic acid

50  
 TOPOLOGY:linear

CLONE:HUMGS01967

## SEQUENCE DESCRIPTION:

GATCTGATGT TCCTTTTATT TATAACAATG TTAAATGCAA TTGTCTTGTA CCTTGAGTTG 60  
 AGTATTACAC ATTAAAGTAA AGTACAAGCT GTAAA 95

5

SEQ ID NO:1750

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS01968

SEQUENCE DESCRIPTION:

GATCCAGAAG TAAATGTATC TNCAAGCTGA TTAAATTGT AGATTNNTC TTCATTGCAT 60  
 ATTNCTGAT GTTGAATAAA GTCTGAGTAT TAAA 94

15

SEQ ID NO:1751

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01969

SEQUENCE DESCRIPTION:

GATCCAAAGT ATATTTTAC TGAGAATATA TCTGAAAAA TTGAATTGA GATTAAATT 60  
 TTAAATGAAA TATATTTACT TTTTTTAAA 89

25

SEQ ID NO:1752

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01970

SEQUENCE DESCRIPTION:

GATCCTGGCC CCTCAACCTC CTGTGGAACC CAGCAGTTCT GTTATATCCC CTGCTACCCT 60  
 AGATGAATTA AGACGGTTAA ATACTGAAA 89

35

SEQ ID NO:1753

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01972

SEQUENCE DESCRIPTION:

GATCTGTCTT GCTTATTGTT GCCCCTGCG NCTAGCACAA TTCTGACACA CAATTGGAAC 60  
 TTAATAAAAA TTTNTTTTAA CTGTTTAAA 89

45

SEQ ID NO:1754

SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS01973

55

## SEQUENCE DESCRIPTION:

GATCATATGG TAGTTTTGTT TTACTAATCT AAGGGTACTA GCATCTACAA TNATATAGAC 60  
 AAAATAAAAT ATTTCTTTAA TGGCAAA 87

5

SEQ ID NO:1755  
 SEQUENCE LENGTH:85  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01974

10

## SEQUENCE DESCRIPTION:

GATCTGTTTT CTCTAAAATC TTACCATATT GTCTGTATAT GGTGTAAAT NCAATGGAA 60  
 AGTAAACGT TTTGGCCCTG ATAAA 85

15

SEQ ID NO:1756  
 SEQUENCE LENGTH:88  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01975

20

## SEQUENCE DESCRIPTION:

GATCCTGCTG GAAACCACGG CAACCTGTAT CCACTATTAG GAGGTAAAAA TCAATAAAAT 60  
 GGCCCATTC A TTTGTGTTGT AGCTCAAA 88

25

SEQ ID NO:1757  
 SEQUENCE LENGTH:84  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01976

30

## SEQUENCE DESCRIPTION:

GATCTACAAC ATATAAAATT GTGTATTTTC NTTTGGTTGT CCCTATTAAC AAAAAAGTAT 60  
 TTNAATAAAA ANTTGAAATG NAAA 84

35

SEQ ID NO:1758  
 SEQUENCE LENGTH:82  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01977

40

## SEQUENCE DESCRIPTION:

GATCCCACTG TAAAATTGGA AATGGGCAGT TCTGAATTTT CACGTTTGAA ATGTAAAATA 60  
 TAAACTTCAG TCAATATCCA AA 82

45

SEQ ID NO:1759  
 SEQUENCE LENGTH:82  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS01978

50

55

## SEQUENCE DESCRIPTION:

GATCTGGACG TTCACGTGCA CTCTCTTCCT GTACAGTATT TATTGTTCTT GGCACTTTAT 60  
TTAAAGATAT TTGACCTCA AA 82

5  
SEQ ID NO:1760

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

10  
TOPOLOGY:linear

CLONE:HUMGS01979

SEQUENCE DESCRIPTION:

GATCCTTACT CCTGCATTGT TCTTTGCCAG NGNCCTATTT AAAAATTTTA AAATTCTCAT 60  
TAAAGTCAGC TTGGGTTTAA A 81

15  
SEQ ID NO:1761

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

20  
TOPOLOGY:linear

CLONE:HUMGS01981

SEQUENCE DESCRIPTION:

GATCTAAAGA GAAAAGGGAG AAGAGGGAAA AAGGAAACAA AGGAGAAGAA AGAGGGAAAG 60  
GAAAAAAAAG AAAAAGAAA 79

25  
SEQ ID NO:1762

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

30  
TOPOLOGY:linear

CLONE:HUMGS01982

SEQUENCE DESCRIPTION:

GATCATGAAA GGTGATAAGC TCTTCTATGA TAGGGGAAGT AGCGTCTTGT AGACCTACTT 60  
GCGCTGTTGT ACTCTGAAA 79

35  
SEQ ID NO:1763

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

40  
TOPOLOGY:linear

CLONE:HUMGS01983

SEQUENCE DESCRIPTION:

GATCAAATAT TTGCGCTTTN ACTNAAATCA GCCAGCCCAT NACCCCAAT AAAGGGCAGC 60  
TGCCTCTGCT CCCTCTGAAA 80

45  
SEQ ID NO:1764

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

50  
TOPOLOGY:linear

CLONE:HUMGS01984

## SEQUENCE DESCRIPTION:

GATCAAATTT CTAAAGCAA ACAACAAAAA TGTACATTTC TGTTTTTCCT TTATAAAAC 60  
 AGGTGTACTC TTTATCAAA 79

5

SEQ ID NO:1765

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS01985

SEQUENCE DESCRIPTION:

GATCTAGTGT CCTTTTGTGA CACTAAACAG GTGAATGCTG ACTTTTTTCA TTCTCCAATA 60  
 AATNTCACTG AACTGAAA 78

15

SEQ ID NO:1766

SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01986

SEQUENCE DESCRIPTION:

GATCTTTGTT TAGTTTCAAG TCTTTTATA ACTAAATCTG CTGGCATTAG ACAATAAATA 60  
 CATTITCAAA ATAAA 75

25

SEQ ID NO:1767

SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01987

SEQUENCE DESCRIPTION:

GATCATATAT ACTTGCATAA TATCATCCCT TCCCTTGATT TCTTTCAATC TAAAAATAAA 60  
 TATGAGAAAA ACAA 75

35

SEQ ID NO:1768

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01988

SEQUENCE DESCRIPTION:

GATCGATATT AATGTATCCA ATGAAATAAT CGACTTGTNC TTGATAGCCT CATTAAAGCA 60  
 TTTGGTTTTN CACATAAA 78

45

SEQ ID NO:1769

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS01989

55

## SEQUENCE DESCRIPTION:

GATCTGAGCC CCCAAGATGG AGAATGGGGA GGAGCTTTT ATGGCGGACT GATTAAACT 60  
CTTAAGCATT TAAA 74

5

SEQ ID NO:1770

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS01990

SEQUENCE DESCRIPTION:

GATCTGCTTG GCCTTGATAA GCTATGTTGT TGCACITTAAC ACATTAAAT TATACAATCA 60  
TCAACCCCA AA 72

15

SEQ ID NO:1771

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01991

SEQUENCE DESCRIPTION:

GATCCTCCC TTCAAATGAC TGTAATTAAC AACACTTAA AACTTGAAT AAAATATTGA 60  
AACCTCAA 69

25

SEQ ID NO:1772

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01992

SEQUENCE DESCRIPTION:

GATCTATTCT GAAGCTGTTT ATTTTAAACA AATAAAATGT TACAGGTTT ACATGATTTA 60  
TTCTCAA 68

35

SEQ ID NO:1773

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01994

SEQUENCE DESCRIPTION:

GATCCGTAAC TNCGGGATAA GGATTGGCTC TAAGGGCTGG AGAAGGAATG AATAAAAAA 60  
AAGAAA 66

45

SEQ ID NO:1774

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS01995

55



## SEQUENCE DESCRIPTION:

GATCCCATGT CTCTGCCAGG ACCAAGGCNG ATGTTTCCCC ACTAATAAAG TGCCGGGTGT 60  
CAGCAAA 67

5

SEQ ID NO:1775  
SEQUENCE LENGTH:65  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10

CLONE:HUMGS01996  
SEQUENCE DESCRIPTION:  
GATCCTTTTT AATACCACAG CATTTGTACT GTTCCTTTTT AATATACTGA AAATATAAAA 60  
GGAAA 65

15

SEQ ID NO:1776  
SEQUENCE LENGTH:71  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20

CLONE:HUMGS01997  
SEQUENCE DESCRIPTION:  
GATCCGATTA TTTCTGCCAG TNTATTTTGG NCACTTTATA ATCATTAAAG CACTTTCTTG 60  
GCAGGCNCAA A 71

25

SEQ ID NO:1777  
SEQUENCE LENGTH:72  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

30

CLONE:HUMGS01998  
SEQUENCE DESCRIPTION:  
GATCTTACAA TAATGTTCCA CTCTGCAAAT TTTTAAGGTT CAAATAAAGT TTAATTGTTT 60  
GCAAACTGTA AA 72

35

SEQ ID NO:1778  
SEQUENCE LENGTH:65  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

40

CLONE:HUMGS01999  
SEQUENCE DESCRIPTION:  
GATCATTGCA CCATGTCAGA CTTTTGTATA TNCCTTGAAA ATAAATGAAA GTNAGAATCN 60  
TCAAA 65

45

SEQ ID NO:1779  
SEQUENCE LENGTH:62  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02000

50

55

## SEQUENCE DESCRIPTION:

GATCCTGTCC TGATTCTCAA AAATTATTTT CTCTGTATGA TAAAAAGTTT ATTCCATTTA 60  
AA 62

SEQ ID NO:1780

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02001

## SEQUENCE DESCRIPTION:

GATCCCTTCA TTTGAATATT AATGGCTTTT TCCATTAAAG AATAAAATAT TTTGGACAAT 60  
GCCAAA 66

SEQ ID NO:1781

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02002

## SEQUENCE DESCRIPTION:

GATCAAATTT ATAAGTTATT ATTTTAAATT TTCTAAATTA AATAAAAGAA AGAATGCAAA 60  
CCAGGAAA 68

SEQ ID NO:1782

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02003

## SEQUENCE DESCRIPTION:

GATCAATAAA GAGTAATTC TTGCTAAATA AATAAAAGAA ACCTTGTTGA AAAACTAAA 59

SEQ ID NO:1783

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02005

## SEQUENCE DESCRIPTION:

GATCTGAATN ATGCACCCCA CCCCCACCC AATAAGAAA TAACAGAAAA CCCTCGAAA 59

SEQ ID NO:1784

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02006

## SEQUENCE DESCRIPTION:

GATCTTCATT TTTTTTTT AACTTGGCGT TTTTGAATA AAAACCTTT GTCTTAAA 58

SEQ ID NO:1785  
SEQUENCE LENGTH:59  
SEQUENCE TYPE:nucleic acid  
5 TOPOLOGY:linear  
CLONE:HUMGS02007  
SEQUENCE DESCRIPTION:  
GATCTCAGTT GTAAATAGAA AAATCTAATT CAATAAACTC TGTATCAGCC CCAACAAA 59

10 SEQ ID NO:1786  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS02010  
SEQUENCE DESCRIPTION:  
GATCCAAAGT CATGTGTCCA CACATTCATA AATAAAAATT TTACCTATGA AA 52

20 SEQ ID NO:1787  
SEQUENCE LENGTH:51  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02011  
25 SEQUENCE DESCRIPTION:  
GATCCAGTGA AGCCAGAAGC CAAATAAACT CAAAAGCTGT CTCCCCACAA A 51

30 SEQ ID NO:1788  
SEQUENCE LENGTH:54  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02012  
SEQUENCE DESCRIPTION:  
35 GATCCTAATT TATGCCTATG CAAAAATAA ATAACGCCCA AGAGCTGTGG GAAA 54

40 SEQ ID NO:1789  
SEQUENCE LENGTH:53  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02013  
SEQUENCE DESCRIPTION:  
45 GATCGCCTAG TATGTTCTGT GAACACAAAT AAAATTGATT TACTGTCTGC AAA 53

50 SEQ ID NO:1790  
SEQUENCE LENGTH:58  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
55

CLONE:HUMGS02025

SEQUENCE DESCRIPTION:

GATCCG TAGT AATAAATTCT CAGAGGACTC AGCCTTTCTT GCGGGTCTGG AGCTCAAA 58

SEQ ID NO:1791

SEQUENCE LENGTH:597

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02039

SEQUENCE DESCRIPTION:

GATCAGAGTC TCTTGGGCAT TTTATATTTT GCATTCTGAT GTACCTAGGA GTTTTGTTAA 60  
 ACAGATGATG TATGTNAGTA TTTATCCCAT TTTATGCAAT TAACCAAATC AACCAAAAAA 120  
 AGTGACCATG AAGTCCTGTA TTTGTNTTTT TACTACATGT AGGAACTCTC ATGTGAATGA 180  
 GTACTGTAGT AATCCATTCT ATGGGAGCCT TATTTTCAGAA ATATTTCAAA CTGGTGCAAA 240  
 TGGAAAAGAC TTTCTCTTTT CCTTTAAAGC TAAAGACAAG AATATCATGC TATACAGGTG 300  
 CAACTCAATC CCCGTTAATA AAAACCAATG TAGGTATAGG CATTCTACCC TTTGAAATAG 360  
 CTGTGTCCCA ACCTGTTGCC ATTGATTTT TGGGAATGGC TTTAGGAAAT ATCCAAGTTG 420  
 TCCTTGGAAT TGTCTAACCA TGGNCATAAA CAGTTGTCTC CCTTCTACTT GTGTAGAATA 480  
 CTTTGGNCTT AATTTTCCTN CCAGATACAG GGGGGTACCT GCCTGTTTTT CNAAGGGTTT 540  
 ATTACTGGNG GTACCATTG GTAGGATTGT TTTAAATAAA AAAACCTGGT TTTTAAA 597

SEQ ID NO:1792

SEQUENCE LENGTH:518

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02040

SEQUENCE DESCRIPTION:

GATCCAAAAC TGGACCCCTG GAGCCGTCGA CTCACAGATG GATGACATGG ACATGGACTT 60  
 AGACAAGGAA AAAANNCAGG ACTTGAAGGA GCTCAAGGTG CTAGTGGCTG ACAAGGACCT 120  
 TCTGGACCTG CACAAGAGCC TGGTGTGCAC TGCTCTCCGG GGAAAGCTGG GCGTCTTCTC 180  
 TGAGATGGAA GCCAACTTCA AGAACCTGTC CCGGGGGCTG GTGAACGTGG CCGCCAAGCT 240  
 GACCCACAAT AANGATGTCA GAGACCTGTT TGTGGACCTC GTGGAGAAGT TTGTGGAACC 300  
 CTGCCGCTCC GACCACTGGC CACTCAGCGA CGTGCGGTTT TTCCTGAATC AGTATTCAGC 360  
 GTCTGTCCAC TCCCTCGATG GCTTCCGACA ACAAGGCCCT CTGGGACCGC TACATGGGCA 420  
 CCNTTCCGNG GCTGNCTNCT GCGGCCTGTN ATCATGACTG AGGTGGCCTN CCAAANGTTN 480  
 CGCCCAAGGT TGACAATAAA GTTGCTCTGA GTTTGAAA 518

SEQ ID NO:1793

SEQUENCE LENGTH:513

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02041

SEQUENCE DESCRIPTION:

GATCTGTAAT TTTAATTTT ACCCTCTGTA CCCCATGACC TTATCCTTCC TCTCCTTCCT 60  
 TGTTACCCAT GAAAACTGG CAACATTCCA AGAATAGCAT CTGTACAAAG GGGAAAGAAC 120

ATAAAGGTAA AACAAAACAA AACAACATTT TGAGAACAAA GATGACCATA ACCACTGAAG 180  
 GGAATCACAT CTTTAAAGAC AAATTCATAT TCTTTTATTT GTTATGGCAG ATGACAAGAT 240  
 GGTACAACCT TTATTCTTTT NCAAAATAAA ACAAAGGGCA CAGCATCTGT AGTCAGCCGA 300  
 CAACTATTNC GGCCTTTTGG GGGTNGGTCT NGCCGTACTT GTGATTTCGA TGGTACGTGA 360  
 CCNTNTTCTG GAAGGCTTGC CCCNTTGCCC GTGTACATAG GTGCATTGGT TNCNTGGGA 420  
 GGGGCCCAAG NACTTTTNGG CNANNGTTGT ACTGGTATTG TNATGAAATT TNCGGTTGGN 480  
 CCTCTTGNA NTTTTTNTG CANGAANGNN GGN 513

SEQ ID NO:1794

SEQUENCE LENGTH:499

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02042

SEQUENCE DESCRIPTION:

GATCTCTTAA GAGATGATGG ACTCATGTAT GTCACCCGAC TTCGCAACAC TGGGGTTCAG 60  
 GTGACTCATA ACCATGTGA GGTGGATTC CATGGAGCAT TTTTATTCT GGGACTTAAA 120  
 ATTAGTCACA GACTTATAAA TCAGTATATT GAGTGGCTAA AGGAAAATCT ATAGTAAAAC 180  
 ATGTAGTAT AACATATTTT AAAAAATAAA TCTGAAAACC TCAGAAAATT TGCATTAGAA 240  
 ATTGGTCTTT CTTAGAATGG TCTAGTTAAG TTCCACATGT AGCATAATTC TTAATAGGC 300  
 ACTTTTCTGT TTTTTTTTNC TNACTGTGGG ATTTTCATNC AATTTTCTAC ATTGTCTATC 360  
 TGCTTTTCT GNGATTTTCC NCTTACACTG TTAATCTNAT TTTAAAAAAA TGTACATNCC 420  
 NNGNANACNT TAANTTTGGG GAGTTNGGCT ACNANTTNAC GGTGCCAGG GGGNTTAAAT 480  
 GGTGGGGCCA ATTTTAAA 499

SEQ ID NO:1795

SEQUENCE LENGTH:483

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02043

SEQUENCE DESCRIPTION:

GATCAAAAGCG CCACTGCCCT GCACCTCCTG GGC CGCGTGG CAACCCGCTG NGCACAGCAT 60  
 GAGGCCAGGG NCCCAGAACA CAGTGCCTGG CAAGGCCTCT GCCCNTGGCC TTTGAAANAA 120  
 AGGCCAGCAG CAGATAACAA CCCCGGACAA ATCAGCGATG TGTACCCCC AGTCTCCAC 180  
 CTTTCTTCT AATGAGTCGA CTTTNNCTG GAAAGCAGCC GTTCTCCTT GGTCTAAGTG 240  
 TGCTGCATGG AGTGAGCAGT AGAAGCCTGC AGCGGCACAA ATGCACCTCC CAGTTTGCTG 300  
 GGGTTATTTT AGAGAATGGG GGTGGGGAGG CAAAGAACCA GTGTTTAGCG CGGGACTACT 360  
 GTTCCAAAAA GANTTNCAAC CGNCCAGNTT GTTTGTGAAA CAAAAAAGTG TTNCCTTTTT 420  
 CAAGTTTGAG AACAAAAATT GGGGTTTTAA AATTAAAGTA TACCATTTTT TGCATTTGNC 480  
 AAA 483

SEQ ID NO:1796

SEQUENCE LENGTH:481

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02044

## SEQUENCE DESCRIPTION:

5 GATCCAAAAC GCTTCGAGGC ACCCCAAATT ACCTGCCCAT TCGTCAGGAC ACCCACCAC 60  
 CCAGTGTAT ATTCTGCCTC GCCGGAGTGG GTGTTCCCGG GGGCACTTGC CGACCAGCCC 120  
 CTTGCGTCCC CAGGTNNNA GCTCTCCCT GGGCCACTAA CCATCCTGGC CCGGGCTGCC 180  
 TNGTCTGACC TCCGTGCCTA GTCGTGGCTC TCCATCTTGT CTCCTCCCGG TGTCCCAAT 240  
 GTCTTCAGTG GGGGGCCCC TCTGGGTCC CNTCCTCTGN CATCANCTGA AGACCCAC 300  
 GGCAAACACT GAATGTCACC TGTGNTGCN GNCTCGGTCC ACCTTGGGG CCGTGTGTTGA 360  
 10 CTAAACTTNA ACTTCTTTA ACGGTAATAT TTCCGGCAA AATCCAATGG TTTGGGTTT 420  
 GGTCTTTTAA CNTTGTAAC GGTGCAAT CCAAATAAA GCAATTAATA AGTCAATGAA 480  
 A 481

SEQ ID NO:1797

15 SEQUENCE LENGTH:462  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02045

## SEQUENCE DESCRIPTION:

20 GATCTAAAAG GGTTTTCTTA GAAAGGGCAA TATTGTCCAA TGAAGTAAGC AGAAGGACTC 60  
 TGGGTTAGAA GCATCTGCAC AAAAAGTGGT GAGACCTACT CTCCACTGCT CTGCAGCTGG 120  
 ATGGCTGATG GCAGGCTGAG CAGTGGGGAA GCAGGTTTGA ACAACAGGGA GTCCTTCCAG 180  
 GTCATGTAT ATTGNGAAGA AACATAAAC TATTGTCTGT TACATTCCGA GGTCAAGCCTT 240  
 25 CTNCTTAACG TTTTATAATA TGCAATNCC AGCTTCTGGA AAGCANGTAT CATCATGTAC 300  
 CAAATGCTTT ATACACCATC ACATTCATGA NTTTTNAGC ATGGTCAGAN CTTGTGTAAT 360  
 TATGTCTCTT AGGATGATT TGGGGGAGGA TGTGATTAT TTTCCATAAT TTCCAAANTN 420  
 GCATTTTCCA TTTCAAATA AGGNTAATCT NTTGGGGCCA AA 462

SEQ ID NO:1798

30 SEQUENCE LENGTH:448  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS02046

## SEQUENCE DESCRIPTION:

40 GATCAGCCTG CAGCCATCCC CCGACCCTGC TGCTAGGCCA CGGTCTGCGC CCTGGGGCCT 60  
 CATCTCCCC AGCCCACTTG TTTTCCCCC TTTTATCCC TAGGCCCTTT TCAGACTCCT 120  
 GGGCCCTTGG NNNCTCTTCT CCCATCTCCC TTCACAGGAT GACACCCTCC CATACCCCAT 180  
 AGCTGGGGCC AGCAGGTTCT GCTGAGGGTG GGGCTGGTGT AGGGACCCC AAGAGACCCC 240  
 TGTCTGTCC CTTCAACAGT CCTGGGGAGG CTGGGACTCC CCCTGCCACA AGCCTGGGCC 300  
 ACAGTTCACA TTCACTGCT GGGAGAAGAA ACAGGCCGAG GCCCAANAGT GGCCTGCCCC 360  
 CGGGAGCCAA AGACCCNAGT GGCCACANTG GGATTAGGT NGGGGAGGNT TGGNAGCGCT 420  
 45 NTTTTTATAA ATATTATACA TAAGGAAA 448

SEQ ID NO:1799

50 SEQUENCE LENGTH:448  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS02047

## SEQUENCE DESCRIPTION:

5 GATCTGGTTG GTGGATGAAC AAGTGTCACG CTGGCCATCT CAATGGNGTT TATTACCAAG 60  
 GTGGCACTTA CTCAAAAGCA TCTACTCCTA ATGGTTATGA TAATGGCATT ATTTGGGCCA 120  
 CTTGGAAAAC CCGGTGGTAT TCCATGAAGA AAACCACTAT GAAGATAATC CCATTCANCA 180  
 GACTCACAAT TGGAGAAGGA CAGCAACACC ACCTGGGGGG AGCCAAACAG GCTGGAGACG 240  
 TTTAAAAGAC CGTTTCAAAA GAGATTTACT TTTTAAAGG ACTTTATCTG AACAGAGAGA 300  
 10 TATAATATTT TTCCTATTGG ACAATGGACT TGCAAAGCTT CACTTCATTT NNNNGAGCAA 360  
 AAGACCCCAT GTTGGAAAAC TCCATACCAG TTTTATGCTG ATTGATAATT TATCTACATG 420  
 CATTTCAATA AACCTTTTGT TTCCTAAA 448

SEQ ID NO:1800

15 SEQUENCE LENGTH:432

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02048

## SEQUENCE DESCRIPTION:

20 GATCTGAATT ATCTGGCACC CTCCTGAATG GAACCCAGAG GTACCTCCTG TGTGGAAGGG 60  
 TCCTGGATT TCCCTAACAC CCACCTCTC CCCCTCAGC CATGCTGATG GCAGAGAAGA 120  
 TAAGAACTTG GAGCCCATTT CTCCTGGAG AGGAAAACCT GTCATCTGGC TTTGCGGAGA 180  
 AGGTTCCACC TTACGCTCGT AGTACATTAT CTTTACTATG TGCTAGGATA TCATATTAA 240  
 25 AAGGACAAAA AAATGTAAAA TACTTGAATG AGCTTGTATT ATANCAATTA TATTATNNNG 300  
 NGTATCTGCT TTCCAGGCTG AAGTGATTCA TTCAATTATC TAGTCCTGCT TTAGTCCTTT 360  
 GTAATTTGTG GTAATTATGC TTTTCTTTT AATACAAAAA AATGTATAAA ATTAACACT 420  
 TGAAAAGGCA AA 432

30 SEQ ID NO:1801

SEQUENCE LENGTH:430

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02049

## SEQUENCE DESCRIPTION:

35 GATCCGNGCG AGGGCAACAG CGGNTCACCT ACAGCGCACT GTCGATGGCT GCACGAGTCA 60  
 CACCGGAGCC TGGGGCAAGA CAGTGATTGA ATACAAAACC ACCAAGACCT CCCGCCTGCC 120  
 40 CATCATCGAT GTGGCCCCCT TGGACGTTGG TGCCCAGAC CAGGAATTCG GCTTCGACGT 180  
 TGGCCCTGTC TGCTTCCTGT AAACCTCCCTC CATCCCAACC TGGCTCCCTN CNACCCAACC 240  
 AACTTTNCCC CCAACCNGGG AAACAGACAA GCAACCCAAA CTGAACNNN TCAAAAGCCA 300  
 AAAANTNGGG AGACAATTC ACATGGACTT TGGAAAAATA TTNTTTCTT TTGCATTTCAT 360  
 45 NTNTCAANCT TAGTNTNTA TCTTTGANCA ACCGGANCA GGCCAAAAAN CAAAAGGTGC 420  
 ATTCAACCTN 430

50 SEQ ID NO:1802

SEQUENCE LENGTH:428

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02050

SEQUENCE DESCRIPTION:

5 GATCCCAAGG GAAAGATGAT TTGTATGTTA AAGTGACTGC ACAAGTAAAA GTCCAATGTT 60  
 GTGTGCATGA AAAGGATTCC TTGGTTATGT GCAGGGAATC ATCTCACATG CTGTTTTTCC 120  
 TATTTGTTT GAGAAACAGG CTGACACTAT TCTCTTTGAT TAGAAAAATA ACTCATAAAA 180  
 CTCATAATGT TGATATAATC AAGATGTAAC CACTATAAAT ATGTAGAAGA GGNCGTTTTA 240  
 AAAGACCTTA AGCTGGCATT GTGAAGGAAC ACCATGGTAG ACTCTTTTTG TAAATGTATT 300  
 10 TTGTATTTAA TGAAATGCAG TATAAAGGTT GGTGANGTGT AATATANTTG TGTAACAAA 360  
 TCCTGTTAAT AGAGAGATGT ACAGAATCGT TTTTGGTACT GTATCTTGGA AACCTTTGTG 420  
 AAAATAAN 428

SEQ ID NO:1803

15 SEQUENCE LENGTH:401

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02051

SEQUENCE DESCRIPTION:

20 GATCAAAACC AAAGTGTCA ATGTGACAGT CTGAAAATA TATACTCTAC TTCATTCATG 60  
 TTACACTTTT TTCTACTCCT TACCTGCTTT TACTAATGCA TTTATCCCA AGAAAACATC 120  
 CAACAATATG GGAATAATTT GGAACAATAT CCAGCAATG GTATTAAAT AATTTACTGG 180  
 TTACAAAACA ATATTATGAC CAGACTCCAT TTTAGAAAA ATTAATCTG CATCGAAAAG 240  
 25 GGCCTTAAAA AATAGATTTC TAAAATCAAA ATCATGGTTG GCTCATGGGT GGGATTATTA 300  
 GTGTTCCCTTA TAGTAGTTTG TCTGGATGTA CTTTCTGATT CTCCTGTAAT AAGCATGCAT 360  
 TGCTTTTGTA ATNGGGGAAT AATANACCA TAAAAAGGAA A 401

30 SEQ ID NO:1804

SEQUENCE LENGTH:396

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02052

SEQUENCE DESCRIPTION:

35 GATCCGGCTG CAAAATTCAT ACCAACCAAC AAATAAGGA AGATACAAAG TCTTATAGAC 60  
 ATCCGGAAAA AAGATTTTCT CCTGTGCTGG TCTATGATGT ATGTGGCAGT TGCTGTCTGC 120  
 AGTTTACAAT GTATTGTAAA TGAAGATTTT TAAAACTTA TCTTGCTGNT TNNNTNNAA 180  
 40 ATATAAGAAA CTGGTACTTG GTAAAGAAAT CTGTCCGTAA GTACCCAC AATCAGTCAA 240  
 ACTATATTTA AAGCCAGCCT GTTTTCAGAG TATGATGTCC TTTAATGTAA ACTCAATAT 300  
 CAATATTTTA AATGTCCGGA TAATATTCTA GAGGTTTAAA AAATGGAAAT ATTTGANCTT 360  
 TCTATTGAAG ACAATAAAGG TACACAAGTC GTTAAA 396

45 SEQ ID NO:1805

SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02053

SEQUENCE DESCRIPTION:

55



GATCAAGAGC AGTGCTTCTC CATTGTTTT GCAGAGAAAT GTTTTTCATT TCCCGTGTGT 60  
 TTCCATTTC TTCTGAAATT CTGATTTTAT CCATTTTTT AAGGCTCCTC CCCATCTCCT 120  
 TTCTTAAGGC ACTGTTGCTA TGGCACTTTT CTATAACCTT TTCATTCTCG TGTACAGTAG 180  
 CTTAAAAATTG CAGTGATTGA GCATAACCTA CTTGTTTGTA TAAATTATTG AAATCCATTT 240  
 GCACCCTGTA AGAATGGACT TAAAAGTACT GCTGGACAGG CATGTGTGCT CAAAGTACAT 300  
 TGATTGCTCA AATATAAGGA AATGGCCCAA TGAACGTGGT TGTGGGAGGG GAAAGAGGAA 360  
 ACAGAGCTAG TCAGATGTGA ATTGTATCTG TN 392

SEQ ID NO:1806  
 SEQUENCE LENGTH:389  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02054

SEQUENCE DESCRIPTION:  
 GATCCTATTT GGTATGTTTT TGCCACTGT TATGATTCAT CATGTATCTT ACAAGAGCCA 60  
 CTCAAGCAAG ACTCTGCTTC TATGTATGGT GAGGCCCTGT TGTCTAGGC TAGAATAAAC 120  
 TCTTTGTATG CCTCAGTGAA TATGCCAGGT AAAATATATG CAGTCAAGAA TGAATTATTT 180  
 TTCTGACTAA AGTGTGTAGC AGTAAGTTCA AAATNGTGCC CTTGTTTTAA CAGTTTCTGT 240  
 CAACATCTTC TCATTTTCC CTACAAAAAC ACCAGGGTGT ATTATAAGTA CTGCCTGTGA 300  
 GAATTTGCAC TTTATGTATT TGTGTGTGGG ATTCCTGTG GTTTTAGCCA AATGAAGTGT 360  
 TATCNNTAAT AACCAGGTCT CTCATAAA 389

SEQ ID NO:1807  
 SEQUENCE LENGTH:388  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02055

SEQUENCE DESCRIPTION:  
 GATCCAATTG ATGTATATGT TTATATACTG GGTTCCTGTT TTATATACCT GGCTTTTACT 60  
 TTATTAATAT GAGTTACTGA AGGTGATGGA GGTATTTGAA AATTTTACTT CCATAGGACA 120  
 TACTGCATGT AAGCCAAGTC ATGGAGAATC TGCTGCATAG CTCTATTTTA AAGTAAAAGT 180  
 CTACCACCGA ATCCCTAGTC CCCCTGTTTT CTGTTTCTTC TTGTGATTGC TGCCATAATT 240  
 CTAAGTTATT TACTTTTACC ACTATTTAAG TTATCAACTT TAGCTAGTAT CTTCAAACTT 300  
 TCACTTTGAA AAATGAGAAT TTTATATTCT AAGCCAGTTT TCATTTTGGT TTTGTGGTTT 360  
 TGGGTAAATA AAACAATACT CAAATAAA 388

SEQ ID NO:1808  
 SEQUENCE LENGTH:379  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02056

SEQUENCE DESCRIPTION:  
 GATCTTTTCC ACCAGCACCC AGAGTGTCTT CTTTCTGGGC AAGGTCGTCG ACCCCACGAA 60  
 ACCATAGCCC TCCCAGGGCT GTCATCTGT TCCAAGCAGG AGGATGTGGC AGGGGAGGGC 120  
 TGGGAGTGAG TAGCTCTGTG TTTAGAGTTG GGGACAAGGA TGACACCGAA GTCCAGGAGT 180

CCAGGACAGC AGGTGCTGGC CGGTGGGGAG CGGGGAGGGG CACTGAGATG GGCAGGGCCT 240  
GGACATTCCA CACCTGGTG CTGTGCAGCC TCTGGCAGAG CATCCGACCT CTTGGAGCAA 300  
GTTTCTGCCT CTGGAAGGG GCGGGGCCCT TTTCACAACA GGCTGGTTTG TACCGAGTAA 360  
ACAACACGNT GCCATGAAA 379

SEQ ID NO:1809

SEQUENCE LENGTH:379

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02057

SEQUENCE DESCRIPTION:

GATCCTAGGG GGTTTTGTTC GGTTTTNAAT TGTGAGGAAT AAAAAATNTT CTGCCCACAC 60  
TGGCATTTTA AGGTGACTGA GGTCAAACGT TGTTCCTTA GGTGAAATA GCAGCCAAAA 120  
CATTCTTNAC GCAGGGGCTT GGGATATGGC TGCTGGCAAC ACATTTTGTG GTGGGCTCCT 180  
TAATTTAATG ATAAATTTA AGCTAAACAC AAGCCAAAAA TGAATAGGTT TTTTNAATTT 240  
TNATTTTTC CTAAACAGGC AATTGAAATA CATGGTACAA AAATAAGTGG TAAGATAATT 300  
GTAAATGGA AATGGGCAGA NTATTCAATT TTCCATCTAT GNAATTTTC NCATTAAAAAC 360  
TCATAGNTTT CTTTGNAAA 379

SEQ ID NO:1810

SEQUENCE LENGTH:358

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02058

SEQUENCE DESCRIPTION:

GATCNGTTCA GCCCTGAAAA GTCCAAACTC CCAGGTATTG TTGCAGAAGG NCGAGATGAC 60  
CTCTATAAAT CAGATGCATT CCATAAGGCA TTTNTTGAGG TAAATGAAGA AGGCAGTGAA 120  
GCAGCTGCAA GTACCGCTGT TGTGATTGCT GGCCGTTTCG TAAACCCCAA CAGGGTGACT 180  
TTCAAGGCCN CCNGGCTTNA AAAAGTTTT ATAAGAGAAG TTCCTCTGAA CACTATTATC 240  
TTCATGGGCA GAGTAGCCAA CCCTTGTGTT AAGTAAATG TTCTTATTCT TTGCACCTCT 300  
TCCTATTTTN GGTTTGTGAA CAGAAGTAAA AATAAATACA AACTNNTNNC ATCTCAA 358

SEQ ID NO:1811

SEQUENCE LENGTH:358

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02059

SEQUENCE DESCRIPTION:

GATCGTTTCT NATCTCNAAG TNCCTCATTG AGNTCGGTGC ATCTGGCCAN TGAGTCTGCT 60  
GAGACTCTTG ACAGCACCTC CAGCTCTGCT GCTTTCAACA ACAGTGACTT GCTCTCCAAT 120  
GGTATCCAGT GATTCGTTGA AGAGGAGGTG CTCTGTAGCA GAACTGAGC TCCGGGTGGC 180  
TGGTTCTCAG TGGTTGTCTC ATGTCTCTTT TTCTGTCTTA GGTGGTTTCA TTAATGCAG 240  
CACTTGGTTA GCAGATGTTT AATTTTTTTT TTAACAACAT TAAGTGTGG CCTCTTTCTA 300  
CACCTGGAAA TTTACTCTTN GAATAAATAA AACTCGTTT GNCITTNCT TCTGCAA 358

SEQ ID NO:1812

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02060

SEQUENCE DESCRIPTION:

GATCTATACT AGATAATCCT AGATGAAATG TTAGAGATGC TATATGATAC AACTGTGGCC 60  
ATGACTGAGG AAAGGAGCTC ACGCCCAGAG ACTGGGCTGC TCTCCCGGAG GCCAAACCCA 120  
AGAAGGTCTG GCAGNNNTCA GGCTCAGGGA GACTCTGCCC TGCTGCAGAC CTCGGTGTGG 180  
ACACACGCTG CATAGAGCTC TCCTTGAAAA CAGAGGGGTC TCAAGACATT CTGCCTACCT 240  
ATTAGCTTNN TTTTATTTT TTAACTTTTT GGGGGGAAAA GTATTTTAA GAAGTTTGTG 300  
TTGCAATGTA TTTATAAATA GTAAATAAAG TTTTACCAT TAAA 344

SEQ ID NO:1813

SEQUENCE LENGTH:338

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02062

SEQUENCE DESCRIPTION:

GATCCAGTAG TAGAGACATC ATCGGTCCAA AAGACTTTGC ATCTCATTAG TTGTCCATAG 60  
TGACTIONCAG GAGGTGGCTG GCATCTATAA CGTGTGGGAC GTTTTTATGT AAAGAACTGC 120  
CTGTGTTTTT TTTTNAACC AAAGACACTG NCCATAGATT GACTTATACT TTTATAAGTC 180  
TAATTGAAAT ACTTGGGGTA CTATGAAAGG NCTGTNCCTT GNGTGGCTAC GATTAGAAAA 240  
TCAGGNCTAA CAAACTTTTC TTTGTCTGGA NGCATATATA TTTGTGATAT AATTNAATA 300  
TGTATAATTT TGGTTAATA AATCAAACTCT ATGCCAAA 338

SEQ ID NO:1814

SEQUENCE LENGTH:336

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02063

SEQUENCE DESCRIPTION:

GATCCATAGA ATGGATACTG GGAGACAATT AGTAGACTTT GCTACAGGTA GCCAATAGCC 60  
CAGCCTGCAG AGTCACGTCA GATATGAAAT CCCAAAGTTC CTCCTGACTA TTGGCAACAA 120  
CAATCACTAA CTGCTACTAC AAAAAGGTAA AACAAAAATG AACTTACACT TTCAAAATAT 180  
CAITCATGTA TATTAAACAA ATACTTCTTG AGTGTCTACC CAGTGCCAGA CAGTGGTCTA 240  
GGTTCTGGGA GGTACAGCAT CGTGGGCCAC ATGGTTAGAA GCTGAGTGT CTAACAAGG 300  
AGGCTGATTT TGCTGCTCTA CTTTGCACTG GTTAAA 336

SEQ ID NO:1815

SEQUENCE LENGTH:335

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02064

SEQUENCE DESCRIPTION:

GATCTGGATG TGGATGATGC GCCTGGAAC AGTCAGCAGG CAACTCCGAA GACAACGAGA 60  
 TAAGCACCTT TCACAACCTC GGAACGTTT ATTCCCCTGTAAGCTTCTC ACCAGCATGG 120  
 CCATCTCGGT GGTGTGCTT TTCTTCCTGG TGCCTGACT GCCTGGTGCC CAGCACATGT 180  
 GCTGCCCTAC AGCACCTGT GGTCTTCTC GATAAAGGA ACCACTTCT TATTTTTTTC 240  
 TATTTTTTTT TTTNGTAAN CCGGNANACC TCCTCCAGCC ATGAGGNNGG GGNNTANCCA 300  
 NGTGTNATGT TTNGGAAANN NAAATGGNAT CTTN 335

SEQ ID NO:1816  
 SEQUENCE LENGTH:335  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02065

## SEQUENCE DESCRIPTION:

GATCCATGTG TAATATCACA AGAAATTATG GAAAAATATA ACATAAAATT AAAGTGGACA 60  
 AACCAACAAA AGCTTTATTC AAGAACAGGT GACATAGTTG AATTTGTTG TAAATCTGGA 120  
 TATCATCCAA CAAAATCTCA TTCATTTGCA GCAATGTGTC AGAATGGGAA ACTGGTATAT 180  
 CCCAGTTGTG AAGAAAAATA GAATCAATGG CATTACTATT AGTAAATGC ACACCTTTT 240  
 CTGAATTTAC TATTATATT GTTTCAATT TCATTTTCA AGTACTGTT TACTCATTT 300  
 TATTCATAAA TAAAGTTTG TGTGATTG TGA 335

SEQ ID NO:1817  
 SEQUENCE LENGTH:334  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02066

## SEQUENCE DESCRIPTION:

GATCTTGATG CGGGACTTCA GTCCTAGTGG CATTTTCGGA GCGTTTCAA GAGGTACTA 60  
 CCGNNACTAC AACAAGTACA TCAATGTGAA GAAGGGGAGC ATCTCGGGA TTACCATGGT 120  
 GCTGGCATGC TACGTGCTCT TTAGCTACT CTTTCTAC AAGCATCTCA AGCAGGANGC 180  
 GCTCCGCAAA TACCACTGAA GAGGACACAC TCTGCACCC CCCACCCAC GACCTTGGCC 240  
 CGAGCCCCCT CGGNNGGAAC ACAATCTCAA TCGTTGCTGA ATCCTTCAT ATCCTAATAG 300  
 GAATTAACCT CCAAATAAAA CATGACTTGG TAAA 334

SEQ ID NO:1818  
 SEQUENCE LENGTH:328  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02067

## SEQUENCE DESCRIPTION:

GATCCAAACA TGAAAGCTGG AGCTACAAGT GAAGGCGTTC TGGCAAATTT CTTCAACAGT 60  
 TTGTTGAGTA AAAAGACTGG CTCTCCAGGA GGCCCTGGT TGAGTGGTGG TAGCCCTGCA 120  
 GGTGGGGCTG GAGGTGGAAG CAGTGGTTTA CCACCATCCA CAAAAAGTC AGGCCAGAAG 180  
 CCTGTCTTAG ATGTTTATGC AGAACTAGAC AGAATTACAC GAAAACAGT TACAGTTTCT 240  
 CCCACAACAC CTACATCTCC TACGGAAGGA GAAGCTTCTT GAAGATACCA AATAAAGCCA 300  
 TTTATTCTGT TTTCTGGNT AATGTAAA 328

SEQ ID NO:1819

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02068

SEQUENCE DESCRIPTION:

GATCGGGGCT GCTTATGCCT TTCGTTTATC CTTGGGGTTT GAGAGCGCTG TATTGGGAG 60  
 AGAGTTTAAA AATACATTAG GAGAGAGAAA CCATTAAGG TTTCACTGTC AGAGATATTG 120  
 TAGGTGCTAA TACTGGATT CGTCTCANAT TTAATTTCTT TNATGGGTCT GTTAGTCATT 180  
 CANCAAATCC CATAAGTATG TGTAAATATT TNAATTGTGT AAAACTCATT TGTTACTTTA 240  
 CAGCCTGTAA TAGTGTGTCT GCATTTNCAA CCTGTTGCAA TAACCTTNCT GAAATATTAA 300  
 CACATTAATA AAACCTTTCT TAAACAAA 328

SEQ ID NO:1820

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02069

SEQUENCE DESCRIPTION:

GATCAGAGAA GAGGCTACTG GGGGAGAATT CAGTGCCCCC TTCGCCCTCT AGGGNGCAGA 60  
 CCTCCACTGC CATTGTCTG TNAGCCGCCA AANACCCAC GGGGTGCCCG CATGTCCCTG 120  
 TCTANNNGCA GCCCAGGGCC CCCACTCCTG GCTCCTNACA CTTGCCTCCC CTATGGCCGC 180  
 TCTCCAGACC CTCTCTCTT CTCTCCCCA CATCCGCACC TGCTGTTCCC ACTCTGGGGT 240  
 TCTCAAGTCC ATGAACAGAT ATTGTTGCAT TTTCCACAAT GCTGATTAAC CATAATAAAC 300  
 AATCCAGAAA AGCAGTTTGG CCCAGAAA 328

SEQ ID NO:1821

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02070

SEQUENCE DESCRIPTION:

GATCCAAAAG CCAGTCTCAG GAGTTTACCC CTGGGATGGG GGATGCATCT NCACCTGACT 60  
 TTGGGGCCAC GTGCCCTGTG GCACCCAGC TCACTGGGAG TCTCAGGAGG GATAACCGGA 120  
 TTTNTGTCT TTTCCCTGTC ACTCCACAT CACACAGAAA AATGGCATT CTCTCTGTCT 180  
 CTCCCTGGCA TGGAGAGGGC AGACTGTGCA CATTTCAC TA GGTCCAAAT ACAGAGGGGC 240  
 CCAGGGCCCA GGGGCTTGCA GCTTCGTGAG GGGTCTCTGG CCCAGTTTCC AATGAATAAA 300  
 GTTCTCTTGA CAGTCAAA 319

SEQ ID NO:1822

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02071

## SEQUENCE DESCRIPTION:

GATCATCAGA TGGTCGAGTA CTCTTGAAT GTCTCTTGC TGTTTACTGT GGCCTCTTTA 60  
 CAATGGTGAG ACTTATTCT ACCCTCTACT TTCCACTATT ATNTTTTCC CCTATTGGAT 120  
 AATACTAGTC TGAGCAGCCC TAATACTAGA TGTACCTAAA CAGAGATACA AGCCAAGTCA 180  
 TTGTTCAAGTG TAGTCATTTC TTAGTATCTG TTTATATTTT GTCACACATC AGAATGTATA 240  
 TTTTATAGAG CATGTGTTTG TCTACTNGTT TGTCTACTAT AATATGTCTT TAATAAAGCT 300  
 AAAANCATTG TGAAG 315

SEQ ID NO:1823

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02072

## SEQUENCE DESCRIPTION:

GATCGCTTTT TTGCCGCTCA TATTGAATG CATTGGGTTT CCTGGACCAG CTATTGTCAC 60  
 AAGACTAGGG GGAGGTTGAG GGTGGCATA GCAGGCAGGG GCTGGGATAG ACATTCAACC 120  
 TAGCTNNNT TCATGCTCTT AAGGCTTTAT TTTCTAGAA TGCCAAGAAA CCAACTTTCT 180  
 TTAACATGA CTCATCTCTT CGATTTTCTT GTATAGGTCT TCCTCCCACC CCAATCTAC 240  
 ACTTGTTAGA AACAGAATAA TTACCTTTGC TTAATCCATT ATCAACACTT GGAGATAGAG 300  
 ACTTTACACT TCAGN 315

SEQ ID NO:1824

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02073

## SEQUENCE DESCRIPTION:

GATCGAAAAG GGACCCTGCT TCCAATTTC CTCTCCATT CCTCGAGCTA CTCCAGGGCT 60  
 TAGAAGAATG CTCTTGGTCT GTGGGTCCAG TGTGTCTGT CATCCATTGA AGTGTTCCTA 120  
 CTTTCAAGTG ACAATCTCTT CCTTGGCCCT GCCATAGGGC AGAGCATGTN TGGCATAGCA 180  
 GCCTGACTTT NATGCCCTAA TCTTGAGTTG AGGAAATATA TGCACAGGAG TCAAAGAGAT 240  
 GTCTTTATAT CTGACTGTAT ATAAATGAAG TTTTNGTT TTTTNGTT TCCTTTTGG 300  
 TGCAATAAAG TTTGTTTTGG CAGAAGGAGA AA 332

SEQ ID NO:1825

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02074

## SEQUENCE DESCRIPTION:

GATCAAGGCG CGGACGCTAT CTACGACCAC ATCAACGAGG GGAAGCTGTG GAAACACATC 60  
 AAGCACAAGT ATGAGAACAA GTAGTTCTT GGAGGCCCCC ATCCAGGCCA GAAGGACCAG 120  
 GTCCACCCAG CAGCTGTTTG CCCAGAGCTG GAGCCTCAGC TTGAAGATGA TGCTCAAGGT 180  
 ACTCTTATG GACCACCATT CGCTGTTGGC AAGAAACGGC TTTACTTACA AAACAGACTC 240  
 TTTACCTTCT GCTGTGTTG AAGTATGTTT AGTCAGCATG CTCAGGAAAT AAATGTGAAT 300

TGCCCTTGAA A

311

SEQ ID NO:1826

SEQUENCE LENGTH:309

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02075

SEQUENCE DESCRIPTION:

10 GATCTAGTGT TTGGAACGGA CGTTACCTGC TGGTTTGTGC ACAACAGTGG AAAAGGATTG 60  
 ATTGACGGGC ATTACAAGGA TTAATTCGTG CCTNAGCTCT ACAGCTTTCT CAAACGGCCT 120  
 TAAAGGTTA TAGTTTGGGA AATTATATAT TATTATACAT CTTTCCCTG TCACTTTTGC 180  
 AGATATTCTT CGGTNCCNAT AATTAAAAATG AACCAGATAT CAGGGTGGTT AATTAAAAATG 240  
 15 AACCAGATAT CAGGGTGGTT TATAAAGCCT GTAAACACAC CTNAGAAAAAT ANACATTTTA 300  
 CANATGAAA 309

SEQ ID NO:1827

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02076

SEQUENCE DESCRIPTION:

25 GATCATGAAT AACTGATTAG TAAGTCTTGC CTATATTTTC CTGATAGCAT ATGACAAATG 60  
 TTTCTAAGGT AACAAGATGA GAACAGATAA AGATTGTGTG GTGTTTGGGA TTGGAGAGA 120  
 AATATTTTAA TTTTAAATG CAGTTACAAA TTATAATGTA TTCATATTG TACTTTCTGT 180  
 TAAAATGCAT GATTGCAGAA TTGTTTAGAT TTTGTGTTA TTCTTGATGA AAAGCTTTGT 240  
 30 TTGTCTTGT TTTAAGTTT GCACTCAAAT CTTAAGAAAT AAATCCACCC ATGTTATCAA 300  
 A 301

SEQ ID NO:1828

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02077

SEQUENCE DESCRIPTION:

40 GATCAGTGAA CTCTGGTTTT AAGATAATCT GAAACAAGGT CCTTGGGAGT AATAAAATTG 60  
 GTCACATTCT GTAAAGCACA TTCTGTTTAG GAATCAACTT ATCTCAAATA GTAACTCGGG 120  
 GCCTAACTAT ATGAGATGGC TGAAAAATA CCACATCGTC TGTTTCACT AGGTGATGCC 180  
 AAAATATTTT GCTTTATGTA TATTACAGTT CTTTTAAAA CACTGGAAGA CTCATGTTAA 240  
 ACTCTAATTG TGAAGGCAGA ATCTNTGCTA ATTTTTCAGA TTAAAAATTCT CTTTGAAA 298

SEQ ID NO:1829

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02078

## SEQUENCE DESCRIPTION:

GATCCCTTAT CCAACATGGT TCTAACCTTC AGTACTAAAG AAGATGCAGT TTCCTTTGCA 60  
 GAAAAAATG GATGGAGCTA TGNCATTGAA GAGAGGAAGG TTCCAAAACC CAAGTCCAAG 120  
 TCTTATGGTG CAAACTTTTC TTGGAACAAA AGAACAAGAG TATCCACAAA ATAGGTTGGC 180  
 ACTGACTATA TCTCTGCTTG ACTGTGAATA AAGTCAGCTG TNCAGTATTT ATAGTCCATG 240  
 TATAATAAAT ACATCTCTTA ATCTCCTAAT AAATTGGACC TTAAACTAC AAA 293

SEQ ID NO:1830

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02079

## SEQUENCE DESCRIPTION:

GATCANNATT TGAAAAGGNT TTCTAGAAAT TNGGGGTAAG AAGTACTACC AAAATGTAAC 60  
 TNCTAATCAA GGGTGATGCA CAGCAAAAGC AATGGACCCC ATCCCTCTAA AGCCTGCCCT 120  
 CCTTTGCCCT CAACTGTATA TGCTGGGTAT TTCATTGTN TTTTATTTT GGAGAAAGCG 180  
 NTTTTAACTG CAACTTTCTA TAATGCCAAA NTGACACATC TGTGCAATAG AATGATGTCT 240  
 GCTCTAGGGA AACCTTCAAA NGCANTAAAA ATGCTGTNTT GAAATGCCAA A 291

SEQ ID NO:1831

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02080

## SEQUENCE DESCRIPTION:

GATCTGGGCC TGAATAAGGG TTATCGAATG GTGGTGAATG AAGGTTGAGA TGGTGGACAG 60  
 TCTGTCTATC ACGTTCATCT CCATGTTCTN GGAGGTCGGC AAATGCATTG GCCTCCTGGT 120  
 TAAGCACGTT TTGGGGATAA TTTTCTCTTC TTAGGCAAT GATTAAAGTTA GGCAATTTCC 180  
 AGTATGTTAA GTAACACACT TATTTTGGCC TGTNTATGGA GAGATTCAAG AAATAATTTT 240  
 AAAACCGCAT ACATAATAAA AGACATTGTT GCATGGCTTA TAGTCAAA 288

SEQ ID NO:1832

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02081

## SEQUENCE DESCRIPTION:

GATCCAGCCT TAATNTTTT CTGACATCCT AGTAATAGCA GACCCTGCAC AAAGTGGATA 60  
 TCAGACTTAA TACTGTNAGG AGACAAAATA ATGAGAATAG TTTTACCAA GATAATNAAA 120  
 TCTCGCATCA TGTCTGCATT TTACCATAGA TTGGAGTGCA TCCTTAGGAA ACTGAATGTA 180  
 ACAAAAACCC AGGACATTTT TGGAAATTGT ATGCTCTCTA GCAACTTTGT GTGAATTTT 240  
 ATACAAACAC TGTTCTATGA GTTATATAAA ATGTTATAAA ACTAGAAA 288

SEQ ID NO:1833

SEQUENCE LENGTH:285



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02082

SEQUENCE DESCRIPTION:

GATCCTGAGA ACTTCAGGCT CCTGGGCAAC GTGCTGGTCT GTGTGCTGGC CNNNCACTTT 60  
GGCAAAGAAT TCACCCACC AGTGCAGGCT GCCTATNAGA AAGTGGTGGC TGGTGTGGCT 120  
AATGCCCTGG CCCACAAGTA TCACTAAGCT CGCTTTCTTG CTGTCCAATT TCTATTAAG 180  
GTTCCCTTGT TCCCTAAGTC CAACTACTAA ACTGGGGGAT ATTATGAAGG GCCTTGAGCA 240  
TCTGGATTCT GCCTAATAAA AAACATTAT TTTCATTGCA AGAAA 285

SEQ ID NO:1834

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02084

SEQUENCE DESCRIPTION:

GATCTCATGG GCTTCCCTG GAGGAAAGGT TTTTITGTT GTTTTITTTT NAAGAACTTG 60  
AAACTTGTA ACAAGAGATG TCTGTAGCTT TTTNCCCAT CTGTAGTGTA TGTNAAGATT 120  
NCAAAACCTG AGAGCACTT TCCITTTGTT AGAATTATGA GAAAGGCACT AGATGACTTN 180  
AGGATTTNCA TTTNCCCTT TATTGCCTCA TTTCTTGTA CGCCTTGTTG GGGAGGGAAA 240  
TCTGTTTATT TTTNCCTACA AATAAAAAGC TAAGATTCTA AA 282

SEQ ID NO:1835

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02085

SEQUENCE DESCRIPTION:

GATCTTAAGC TTTGATAAGA GCTGTGCTGT GGCTGAGTAT GGTGTGTATG TGAAGGTGAC 60  
TTCCATCCAG GACTGGGTTT AGAAGACCAT AGCTGAGAAC TAATGCAAGG CTGGCCGGAA 120  
GCCCTTGCCT GAAAGCAAGN CTTGAGCCTG GAAGAGGGCA AAGTGGACGG GAGTGGACAG 180  
GAGTNGATGC GATAAGATNN GGTITGAAGC TGATGGGTGC CAGCCCTGCA TTGCTGAGTC 240  
AATCAATAAA GAGCTTCTT TTGACCCAAA AAAANTAAA 279

SEQ ID NO:1836

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02086

SEQUENCE DESCRIPTION:

GATCCATAGT GCTACCTGCA CCTCTGGATT CTGGATTAC AGACCAAGTC CAAGCCCGTT 60  
CTTACGTCGC CATAAGGCC CCCGAACGGC ATTCTCGGTA CTTCTGTTG TTTTGTACA 120  
TTTNATTAGA AAGGACTGTA AAATAGCCAC TTAGACACTT TACCTCTTCA GTATGCAAAT 180  
GTAAATAAAT TGTAATATAG GAAATCTTTT GTTTAATAT AAGAATGAGC CTGTCCAATT 240  
TCTGCTGTAC ATTATTAATAA GTTTTATTTC ACAA 275

SEQ ID NO:1837

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02087

SEQUENCE DESCRIPTION:

GATCCGAAGA GGAACCTCTG GTCATCTTTA ACAAGAAAAT CAGCAAGAAC CCTACCTTTA 60  
 AGTTATTAAA GGACAAAGTC AAGCTTGTGA AATGAACATT TGTGTATTTA AAANTTGAAT 120  
 CCATTCTGCT GACTTCTTAC TTCACTGCT GTTATAAAA TGTGTAATGA ATTCTAACAA 180  
 CTCAAAATTT GCTTTTGTAC GCNGTATTTT TANGTTANGN AAATATATTT NTGGTATAAC 240  
 TTTTATGCGA NAAATAAAAT ATATTCTGN 269

SEQ ID NO:1838

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02088

SEQUENCE DESCRIPTION:

GATCTCATTG TTTATTAAAC TGTATTCTGT TTACATGTCT TTAACACAGT GGTCTTAAA 60  
 TTGTAAGCTC AGGTTCAAAG TGTGGTAAT GCCTGATTCA CAACTTTGAG AAGGTAGCAC 120  
 TGGAGAGAAT TGGAAATGGT GCGGTAATT GGTGATACTT CTTTGAATGT AGATTTCCTA 180  
 TCACATCTTT AGTGTCTGAA TATATCCAAA TGTTTTAGGA TGTATGTTAC TTCTTAGAGA 240  
 GAAATAAAGC ATTTTGGGA AGAATAAA 268

SEQ ID NO:1839

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02089

SEQUENCE DESCRIPTION:

GATCTATCTA AATATATTAA GTAAAATTAC ACCATTCACT TGTTGGGAAA ATAATCTTTG 60  
 GTTTGGAAGA TATTAACATA ATGGGCATCT TAGAATCATA AATCACATGA AATGAGAGAC 120  
 AATGCAATAT TGTATAATTC CTGGATGATG CAATTGTTT AATTGANTTT TCAAGTGCCA 180  
 TTATAAAGTT TTAATAATTA TCAATATGAG TTGGTGCCCTA ATTTTNNNTT TCCTAAAAAT 240  
 AAAATTTTTC CTTTTATGA GTAAA 265

SEQ ID NO:1840

SEQUENCE LENGTH:261

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02090

SEQUENCE DESCRIPTION:

GATCATAAAA CCTTCATTCC ATAGGTACCC TTTATCCTCA CAGATACAGA GACACCAAGA 60  
 AGAATCTGGA CAAATAGGAC TTGCTAAGTT CTCCACAGTT TATTACCATT AGATTATGTC 120

CTTTTGTNCT CTGATTATAC TTCTGCATAA GACTGTACAT AAAANTACAC AAGTTTTCCT 180  
 ATTTNTTTTT TGTCTTCATT TCTGAAGATT CCTGTCATGT AAAACTTACA GTAAATAAAT 240  
 GTGTGTGCTT TTNTCAATAA A 261

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SEQ ID NO:1841  
 SEQUENCE LENGTH:263  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02091

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SEQUENCE DESCRIPTION:  
 GATCAGGTTA GGGCGAGCGC TACCTCTCCA GCCTCAGCTC TCAGTTGCAG CCCTGCTNAT 60  
 GCCTGCTTGG ACTTGGCCCC TGCCACCTCC NGCCTCAGGT GTCCGCTATC CACCAAAAGG 120  
 GCTCCCTGAG GGTCTGGGCA AGGGACCTGC TTCTATTAGC CCTTCTCCAT GGCCCTGCCA 180  
 TGCTCTCCAA ACCACTTTTT GCAGCTTTTT CTAGTTCAAG TTCACCAGAC TCTATAAATA 240  
 AAACCGACA GACCATGAAC AAA 263

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SEQ ID NO:1842  
 SEQUENCE LENGTH:264  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02092

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SEQUENCE DESCRIPTION:  
 GATCAGAAAG AAACCTTTTG TAGCAATATC AAGAATCTAG TTTCATCTGA GAACTTCTGA 60  
 TTAGCTCTCA GTCTTCAGCT CTATTTATCT TAGGAGTTTA ATTTGCCCTT CTCTCCCCAT 120  
 CTTCCCTCAG TTCCCATAAA ACCTTCATTA CACATAAAGA TACACGTGGG GGTCACTGAA 180  
 TCTGCTTNAN NATCCTGAAA GTTTCTGGGG CTTAAGATTC CAGACTCTGA TTCATTAAAC 240  
 TATAGTCACC CGTGTCTGT GAAA 264

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SEQ ID NO:1843  
 SEQUENCE LENGTH:246  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02093

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SEQUENCE DESCRIPTION:  
 GATCAAAATGT CACACAGCAG TTTCCTTGCA ACACTTTCAG CTCCCCATGC TCCAGAATAC 60  
 CCACCCAAGA AAATAATAGG CTTTAAACA ATATCGGCTC CTCATCCAAA GAACAACTGC 120  
 TGATTGAAAC ACCTCATTAG CTGAGTGTAG AGAAGTGCAT CTTATGAAAC AGTCTTAGCA 180  
 GTGGTAGGTT GGGAAAGGAGA TAGCTGCAAC CAAAAAGAA ATANATATTC TATAAACCTT 240  
 CAGAAA 246

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SEQ ID NO:1844  
 SEQUENCE LENGTH:243  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02094

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## SEQUENCE DESCRIPTION:

GATCTGTGTG CATGTNTGTG TTTGTGTATA TATACATATC TAGGGCTAGT ACTTAGTTTC 60  
 ACACCCGGGA GCTGGGAGAA AAAACCTGTA CAGTTGTCTT TCTCTNATTT TNAATAAAAT 120  
 AGAAAAATCG CGCACTTGGC GTCCCCCCCC CACCCCTTT TTTAAACAAG TGTTACTNNN 180  
 NCCGGGAAAA TTTTCTGTG TTTGTAATTT TAAACTTTA AAATAAATTG GAAAAGGGAG 240  
 AAA 243

SEQ ID NO:1845

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02095

## SEQUENCE DESCRIPTION:

GATCTAGTGA ACATTGACC TCCATTACGG AGAGTTTCCT ATGTTTCACT GTGCAAATAT 60  
 ATCTGCTATT CTCCATACTC TGTAACAGTT GCATTGACTG TCACATAATG CTCATACTTA 120  
 TCTAATGTTG AGTTATTAAT ATGTTATTAT TAAATAGAGA AATATGATTT GTGTATTATA 180  
 ATTCAAAGGC ATTTCTTTTC TGCATGTTCT AAATAAAAAG CATTATTATT TGCTGAGAAA 240

SEQ ID NO:1846

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02096

## SEQUENCE DESCRIPTION:

GATCTAAGCA GCGTTCCAC AGCCCCCTCT AGATTCTTGG AGTTCCGAG AGCTTACTAT 60  
 ACGCGGTCTG TCCTAATCTT TGTGGTGTTC GCTATCTCTT GTGTCAAATC TGGTGAACGC 120  
 TACGCTTACA TATATTGTCT TTTGTCTGCT GTNTGACAAA CGCAATGCAA AAACAATCCT 180  
 CTTTCTCTCT CTTAATGCAT GATACAGAAT AATAATAAGA NTTTCATCTT TAAATGAAA 239

SEQ ID NO:1847

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02097

## SEQUENCE DESCRIPTION:

GATCCATCCT CTCTCCTAGC TGAGTAAATC CGGGTCTCTA GGATGCCAGA GCAGCGCACA 60  
 CAAGCTGGGA AATCCTCAGG GCTCCTACCA GCAGGACTGC CTCGCTGCCC CACCTCCCGC 120  
 TCCTTGGCCT GTCCCCAGAT TCCTTCCCTG GTTGACTTGA CTCATGCTTG TTTCACTTTC 180  
 ACATGGAATT TCCAGTTAT GAAATTAATA AAAATCAATG GTTCCACAA A 231

SEQ ID NO:1848

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02098

## SEQUENCE DESCRIPTION:

GATCCAAAAT GCTGACAGGT TCAAACAAA TTGGAATTGA AAATCAGAGT GCGTTCAAGA 60  
 GTATCAACA ATACTATCTT GTTACTTGCT TATTACCTTA GTAGACTGGA AGCAACACTT 120  
 CACACAAAAA AAGGGTTTGG ATGTAATTC GGATAAGAAG AGATGTTTCT GTAAAGTCTT 180  
 TCCTGAGANG CATATTATT GAGAAAAACA CATATTCTG TTTTAGTAA A 231

SEQ ID NO:1849

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02099

## SEQUENCE DESCRIPTION:

GATCTACCAT GTAAATGTT GTAGAGATAG AGCCATATAA CGTCACGTTT CAAAAC TAGC 60  
 TCTACAGTTT TGCTTCTCCT ATTAGCCATA TGATAATTGG GCTATGTAGT ATCAATATT 120  
 ACTTTAATCA CAAAGGATGG TTTCTTGAAA TAATTTGTAT TGATTGAGGC CTATGAAC TG 180  
 ACCTGAATTG GAAAGGATGT GATTAATATA AATAATAGCA GATATAAA 228

SEQ ID NO:1850

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02100

## SEQUENCE DESCRIPTION:

GATCTACCGG CCCCCTGGG GTGCCCTTGG GGAACCTC TCCTTCACCA TACCCCTGGG 60  
 CACCCCTGA CAACTTCTGC ACATACTGGG GCCCTGCTTA TTNTCCAGG ACAGGCTCCT 120  
 TAAAGCAGAG GAGCCNGTNC TGGGAGCCCC TTCTCAAACCT CTAAGACTT GTTTTCATGT 180  
 CCCACGTTCT CTGCTGACAT CCCCCAATAA AGGACCCTAA CTTTNGGNNN TNAAA 236

SEQ ID NO:1851

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02101

## SEQUENCE DESCRIPTION:

GATCTATGGT TTCTGCCTAC CCAGGATAGT CTTGTCTCTA GACAATGTAT TGATGATGCA 60  
 AATGTTCTGG AACTAAATAG TGGTGATGGT GGCACAACAC TGTGAATGTA CTAAATGTCA 120  
 CTGATTTGTA CGTATTTAAT ATGAATTAAT TGTTAAATG GTGAATTATA TTTATGTATA 180  
 TTTNACCATA ATAAAAATAT GCATTGGAAG ATGCATTTT TGTGAAA 227

SEQ ID NO:1852

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02102

## SEQUENCE DESCRIPTION:

5 GATCTTTGGA CCAGTTTCTA GCAAAGTTGT GTTTGAAAGA TACTCTATTA AAGAAGACTG 60  
 TGGAAATCTTT TTATCGGTGC CCATTATATC CTTAAGTTTG GATATTTAGC TGACCTTCGC 120  
 TTTAACATAG GTCTAATTA TTTGCCGTGT CATTTTCCAT ACAAATCAGT TGATTTAAAA 180  
 AAGTTCATTT CTCATACTGT GCATTAAAAA AAAAATTGGA ACAATTTAAA 229

10 SEQ ID NO:1853  
 SEQUENCE LENGTH:224  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02103  
 SEQUENCE DESCRIPTION:  
 15 GATCTCCTGT TTTTTCAGG CTCCTAAAGT AACATCAGCC ATNTTNAGA TTGGTTCTGT 60  
 TTTGCTACCT TCCCACTGGC CTCAGTGAG CCAAGAAACA CTGCCTGCCC TCTGTCTGTC 120  
 TTCTCCTAAT TCTGCAGGTG GAGGTGCTA GTCTAGTTTC CTTTTGAGA TACTATTTTC 180  
 ATTTTGTGA GCCTCTTGT AATAAAATGG TACATTTCTA TAAA 224

20 SEQ ID NO:1854  
 SEQUENCE LENGTH:223  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS02104  
 SEQUENCE DESCRIPTION:  
 GATCAAGGCC GGACCCCACT GCCCACTGC CCAACTGATA GCCACGCTGA NNGAATGGAA 60  
 GGAAAAATTG CTTGGACCTG CAAGCCCCGC GTACAAGAA AATAATTAAG AAACTTTGG 120  
 AGAGTTAGCT ACTAGCTGCC TACGTGTGN CATTTGCTAT ATAGCATACT TCTTTTTTCC 180  
 30 AGTTTCAATC TAACTGTGAA AGAACTCTG ATATTTTGTG TTN 223

35 SEQ ID NO:1855  
 SEQUENCE LENGTH:227  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02105  
 SEQUENCE DESCRIPTION:  
 40 GATCCTAGTA ATTGCCTAGA AATATCTTTC TCTTACCTGT TATTTATCAA TTTTCCCAG 60  
 TATTTTATA CGGAAAAAAT TGTATTGAAA AACTTAGTA TGCAGTTGAT AAGAGGAATT 120  
 TGGTATAATT ATGGTGGGTG ATTATTTTTT ATACTGTATG TGCCAAAGCT TTACTACTGT 180  
 GGAAAGACAA CTGTTTAAAT AAAAGATTGA CATTCCAAAA AAACAAA 227

45 SEQ ID NO:1856  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02106  
 50 SEQUENCE DESCRIPTION:  
 GATCTATACA AAGTCTTTGA GAGGTGTTAA ATATGGTTAT TTATGCACTG TGGGATGTGT 60

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TCTTCTTTCT CTGTATTCCG ATACAAAGTG TTGTATCAAA GTGTGATATA CAANGTGTAC 120  
 CAACATAAGT GTTGGTAGCA CNTAAGACTT ATACTGCCT TCTGATAGTA TTCCTTTATA 180  
 CACAGTGGAT TGATTATAAA TAAATAGATG TGTCTTAA 219

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SEQ ID NO:1857  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02107

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SEQUENCE DESCRIPTION:  
 GATCAAGAAA GACAAAAAGC CAGCCTGCAG CAAGCACTTT GGAGAGCAAA TCTGNAAAGA 60  
 GAGTAACGCG GAGTGTCAAG AGGTGTGCAG AAAATCCAAA GAAGGCTGAG GACAATGTGT 120  
 GTGTCAAGAA AATAAGAACC AGAAGTCATA GGGACAGTGA AGATATTTGA CAGAAAAATC 180  
 GAACTGGGAA AAATATAATA AAGTTAGTTT TGTGATAAA 219

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SEQ ID NO:1858  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02108

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SEQUENCE DESCRIPTION:  
 GATCTGTCGG AACCAGGACA CAAAAGCAGC AAGAAGCGGG GAGAGAGAGG GATAGAAAAC 60  
 AAGCGCAGGA GAGCCTGCGA ACGCAAAANT GAATGAGGGC TTTTGTGGC TGGGGATGGG 120  
 TTTTGGTTTT GGGGTTTTTT TTTTNAATTT GTTTTGACTT CGTACAGGGT ACTTTTCCC 180  
 AACCTCATCT NTCAGAAATC CATGTGGGNT TCCTGGAAA 219

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SEQ ID NO:1859  
 SEQUENCE LENGTH:217  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02110

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SEQUENCE DESCRIPTION:  
 GATCTGAAGA AATTACCAAA CATTAAAATG AGANAAATTT GCGCTAATGA TGCAATTCCC 60  
 AAGACGTGCA AGAGGAAAAC TATTATAACT GTAGACCAAG ATTTGGGGGA ATTGGAAC TA 120  
 AACGATGAAT CAAGTGATTC AGATGAGGAA ATGACTGCAG TGGCCTAATT GTCTTCACTT 180  
 GAATTGAAAA TAAATAATTT GAGAGCTTCA AATTAAA 217

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SEQ ID NO:1860  
 SEQUENCE LENGTH:216  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02111

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SEQUENCE DESCRIPTION:  
 GATCCATTTC TTAAAATAC TGACATATAG AGTTGTACCT TATATAGAAT ATAGTTGTAT 60  
 CTTGAAGTCA ACATATTAAA TTATTCTCAA AATTATGTAT TTNCAGATTG TACTTGAAG 120

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TTTCAAAGAA AAATTACCGT CTTTTCATAT TGACCTGGAA ACTAAATAGG ATGTGATTCA 180  
GCTACATTAA TTTCTTAATA CAATCTAGGA AAGAAA 216

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SEQ ID NO:1861  
SEQUENCE LENGTH:213  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02112

SEQUENCE DESCRIPTION:

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GATCCTTTTC TTGAAAGAAT AACAGAAAAT GTGTCATCCA TTTTTCAGAA TATAACCACT 60  
CAAGCTACTG GCACATAGTG AAAGATTACT TCTGACATTC CATTNCTCTT CTTTGGAAAA 120  
TTAGTATNGT AATTAAATGT ACTTTTGGAA AATTAATAGA ATTATTTAAA TTACAGTATA 180  
TGTNGCAAAA TATATCACTT TTGATACAAT AAA 213

SEQ ID NO:1862  
SEQUENCE LENGTH:210  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02113

SEQUENCE DESCRIPTION:

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GATCTATCTC ATCAACAAC ACAATGAAGA TATTTTAGAG TACAAAAGAA GAAATGGGCT 60  
GGAATAAACT TTTGAAACAC TAATGTAGTA TGCTCCGTAT AGTGATTGTA GCTGTTCCCTC 120  
TGGATTACAC ATCTGTTGAG TTGTAAATGT GNGANAAAAA GTTATATGTG AATATATATC 180  
AAGCCAGCAT TTGTATTTTG CATCATTAAA 210

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SEQ ID NO:1863  
SEQUENCE LENGTH:209  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02115

SEQUENCE DESCRIPTION:

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GATCGGGGCT GCCAGAGGGN TAGAAGCGAG GGCACCAGCA GTTGTGGGTG GGGAGCAANG 60  
GAAGAGAGAA ACTCTTCAGC GAATCCTTCT AGTACTAGTG GAGAGTTGA CTGTGAATTA 120  
ATTTTATGCC ATAAAAGACC AACCCAGTTC TGTTTNNNC TGTAGCATCT TGAAGAAGAA 180  
AATTATAATA AAGCCCCAAA ATTAAGAAA 209

SEQ ID NO:1864  
SEQUENCE LENGTH:208  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02116

SEQUENCE DESCRIPTION:

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GATCTGGAGC AACAGCTAGG AAATATCATT AATTCTGCTC TTCAGAGATG TTAATAATAA 60  
ATTACACGTG GGAGCTTTCC AAAGAAATGG AAATTGATGG GAAATTATTT GTCAAGCAAA 120  
TGTTTAAAT CCAAATGAGA ACTAAATAAA GTGTTGAACA TCAACTGGGG AATTGAAGCC 180

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AATAAACCTT CTTCTTAAC CATTCAAA

208

SEQ ID NO:1865

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02117

SEQUENCE DESCRIPTION:

GATCTATACT TAGAATGCAA TGTNGACAGA GGGCAGTTAA AATATCCAAG ATGTATTCCA 60

AGACAAAGCA AACAAACAAC TGGAAGTGGT AATCAATTCA ACAGGCCTTC TGAATTNTCT 120

GAAGCNAAG CAACGTTTGC CATNNGATAT TTGTGACACT TTGGCAAATG GAAAAATAAA 180

CCAATTTATA CGTGCAATAA A 201

SEQ ID NO:1866

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02118

SEQUENCE DESCRIPTION:

GATCATGAAG GTATCCACAC TTCCCTTGC ATTCCCTTCT TAACTCTCTG TTACACGTCA 60

TTGAAACTAC ACTTTTTTGG TCTGTTTTG TGCTAGACTG TAAGTTCCTT GGGGGCAGGG 120

CCTTTGTCTG TCTCATCTCT GTATTCCCAA ATGCCTAACA GTACAGAGCC ATGACTCAAT 180

AAATACATGT TAAATGGAAA 200

SEQ ID NO:1867

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02119

SEQUENCE DESCRIPTION:

GATCACATTT TGAAATGCCT AAAAGACTTT ATTGTTCTAA TTATCCAGAT GTACCTTTGT 60

AAAATAGCTC TTTTATGAAT TAGCTGATAA GGCTGTATGT TTCTGGAACA AAATATTGGT 120

CATCTAAAAN CTTTCTGTTT NCTGGGGTCT GGGAAAATAG AAAATAAGAT TTCAAATATT 180

AAATAAGCTT AANGGCACCA AA 202

SEQ ID NO:1868

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02120

SEQUENCE DESCRIPTION:

GATCAGGCCC TTCTTCCAC AGCAATAGTC CCCAATACGT AGATTTTTCG TCTTCTGTAT 60

GTGACAACAT TTTTGTACAT TATGTTATTG GAATTTCCTT TCATACATTA TATTCCTCTA 120

AAACTCTCAA GCAGACGTGA GTGTGACTTT TTGAAAAAAG TATAGGATAA ATTACATTAA 180

AATAGCACAT GATTTTCAAA 200

SEQ ID NO:1869

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02121

SEQUENCE DESCRIPTION:

GATCTNTNTG TTCATTGTAT TCTTTTNTC TCAAGAGTTC CATTTAATGG AAATAAAACG 60  
GTATAATTAA TAATTGTCTA GGGGGGAAAA ATGAAGCAAA TNTCATTGGA TATTTTAA 120  
GGTCTCCACA GAGTTTATGC CATATTGGAA TTTTGTGTA TAATTGTCAA ATAAATATTT 180  
TGGTGANGCA TAAA 194

SEQ ID NO:1870

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02122

SEQUENCE DESCRIPTION:

GATCCAATAC TATTTAGTTT ATTATTGAAA TTGGAAGGAT TCATTGAGCA GCATAGAAGT 60  
TTGTTTACAT GTTACTTTGA GATGCTAGGT ATTTGTGGAA TAAAAAGAA TCAGGCTCTT 120  
TTGTACTNAN TTTTAAATC TGTGATGCTT NTCAAATTA ATTCATAATA AATTGATGCA 180  
ATTCATAAA 190

SEQ ID NO:1871

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02123

SEQUENCE DESCRIPTION:

GATCGAACAG TTTTGAAGCT ACTGTGTGTG TGAATGAACA CTCTTGCTTT ATTCCAGAAT 60  
GCTGTACATC TATTTTGGAT TGTATATTGT GTTTGTGTAT TTACGCTTTG ATTCANNAGT 120  
AACTTCTTAT GGAATTNATT TGCATTGAAC ACAAAGTGA AATAAAAGA AATGGCTGAA 180  
AGAGCAAA 188

SEQ ID NO:1872

SEQUENCE LENGTH:184

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02124

SEQUENCE DESCRIPTION:

GATCCTATTT ATTTGTTTAG GCCATCTTTA ATTTCTTTCA GCAGTGTTTT GTAGTTTCCA 60  
TTAGAGATTT TCCATGTCNT TTGTTAAGTT TATTCCTAGG TATTTTATTT TTIATGGTAT 120  
TNTATTATAA TCCTNNGATG TCTATTATAT AGAAATATAA TTNATTTTNG TTATTGACTG 180  
NNNN 184

SEQ ID NO:1873

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02126

SEQUENCE DESCRIPTION:

GATCCAAGTN CTGACTTTTC CCCCTGACAG CTGTGTGACC TTCGTGAAGT CGCCAAACCT 60  
 CAAATGAGCC CCAGTCATTG CTAGTAAGAC CTGCCTTTGA GTTGGTATGA TGTTCAGTT 120  
 AGATAACAAA ATGTTTATAC CCATTAGAAC AGAGAATAAA TAGAACTACA TTTCTTGCAA 180  
 A 181

SEQ ID NO:1874

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02127

SEQUENCE DESCRIPTION:

GATCTTAAAT TTTCTCATCT CAAAAAATA TGTAAGTGA TAGATATGTT AAATAGCTNN 60  
 TATGTATTTT GCAATGTGTA GTGTATATAT ATAAACATCA CACAGTACAC CATAAATATA 120  
 TTTAATTTT GTCAATTACT CTITAAACCT TAATAAAGTT GATAAACAT TCTTTTTTAA 180  
 A 181

SEQ ID NO:1875

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02128

SEQUENCE DESCRIPTION:

GATCAGGTTA GCAATGATG TAAAGAAGC TTTATTGTCT AGTTGTTTTT TTTCCCCCAA 60  
 GACAAAGGCA AGTTCCCTA AGTTTGAGTT GATAGTTATT AAAAGAAAA CAAAACAAAA 120  
 AAAAGGCAAG GCACAACAAA AAAATATCCT GGGCAATAAA AAAANTATTT TAAACCAA 179

SEQ ID NO:1876

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02129

SEQUENCE DESCRIPTION:

GATCCGGGAG CACACCGTTT CCTGATTGCT CAGGGACTCA TCTTCCCTC CTTGGTGATT 60  
 CCGCAGTGAG AGAGTGGCTG GGGCATGGAA GGCAAGATTG TGTCCATTC CCCCAGTGCG 120  
 GCCAGTCCG CGCCAGGATG GCGANGGAAC TCAATAAAGT GCTTTGAAAA TGCTGAAA 178

SEQ ID NO:1877

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS02130

SEQUENCE DESCRIPTION:

5 GATCATTCTC CGAAAGCAAC TCCTGACAAT TAAGCATTTT TTTCTCCAAA TACAAAGTAT 60  
ATTCTCTTTA TTGGAAAATA AATTAATAAA TATATTCTGT ATTTNNCTC TCCGTGAAAA 120  
ACAAAAGAGC CTCTGACATT ACTGTCTCTC AGTGTGGGT CAGATTGAGG CTTN 175

SEQ ID NO:1878

10 SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02131

15 SEQUENCE DESCRIPTION:

GATCAATCCT TCTTATGTTT GCTTTAATGT GTATTGAAGA AAAGCACTTT TAAAAAGTA 60  
CTCTTTAAGA GTGAAATAAT TAAAAACCAC TGAACATTG CTTTGTTC TAAAGTTGTT 120  
CACATATATG TAATTTAGCA GTCCAAAGAA CAAGAAATTG TTTCTTTTCA AA 172

20 SEQ ID NO:1879

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS02132

SEQUENCE DESCRIPTION:

30 GATCTGATTG TTTAAAAGTA CACAGCACCT CCCTCCCAC TCTCTTTGC TCCTGCTTTC 60  
ATCAAGTGAA AACTCCCTGA GGCCTCCTCA GAAGCTGAGT AGAGGCCAGC ACTATGCTTC 120  
CTGTACAGCC TGTGGAACCA TGAGGCAATT AAACCTCTTT TCTTTATAAA 170

SEQ ID NO:1880

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS02133

SEQUENCE DESCRIPTION:

40 GATCAGAAAA ATTCATCTTT TTTAACCTG CCCTAATTT TCTTGAGGAA TTAATAGAG 60  
CAAACATTT TCAGGTTATG CTTACAATAA AATATACTTA AGAAAATGAC TGAAGATGTA 120  
TGTTTTTGAA TGTTTTGATT AAATAAATGT ACACATTTAG AACACAAA 168

SEQ ID NO:1881

SEQUENCE LENGTH:168

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02134

SEQUENCE DESCRIPTION:

50 GATCAGCCTC CCTGTAAGCC AGTTATCAGT ATCCAAGTGC TTTAACACAG GCTTCTCAGA 60  
AGAAATCATT TTTATTCCTA CCATTATTC ATACCAAAGC ATCATTATGT GCTACAGTTC 120

55

CAATTTCTTA CACAAGAATG AAAAGGGTTA CCAATGCAGC AAGTTAAA 168

5 SEQ ID NO:1882  
SEQUENCE LENGTH:167  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02135  
10 SEQUENCE DESCRIPTION:  
GATCTTACTG TAAGTTGAAG GGAGTTTTCG CTAATCAT GGATTGTGCA AGAATGAACT 60  
GCTGTTGGGT TTGACTGACT GTCGATGGAT TGTGGTGTGG TGTATCTNAA GGCTATTGAA 120  
TGCAACTTAC AATGCTTAGG TAAAAATCTT TATNCTTTTA GTATAAA 167

15 SEQ ID NO:1883  
SEQUENCE LENGTH:165  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS02136  
SEQUENCE DESCRIPTION:  
GATCCTTGAT GAGCCAACAT TGCAGTGTGG ATACATATCT ATGTTTACGC GCTATTAGAA 60  
CAGAAGGGCG TGTATATAGA AATGTTGCTT TGAAGCAATA TTGCAAAAC ACNCAGACTN 120  
25 CAGNATCTGT ATTTGGAAAA AATAAAACAG GTTCTTGTG CTAAG 165

SEQ ID NO:1884  
SEQUENCE LENGTH:168  
SEQUENCE TYPE:nucleic acid  
30 TOPOLOGY:linear  
CLONE:HUMGS02137  
SEQUENCE DESCRIPTION:  
GATCTGACCT CCACGGAGCC GCTGTCCCG NCCCCCTTGC TTCCCGTCTG TCTGTCCTGT 60  
35 CTGATTCTNT TAGGTGTCAT GTTCTTTTT CTGTCTTGTG TTCAACTTTT TTTAAAACTA 120  
GATTGCTTTG AAACATGAC TCAATAAAG TTCCTGNCC AATTTAAA 168

SEQ ID NO:1885  
SEQUENCE LENGTH:163  
40 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02138  
SEQUENCE DESCRIPTION:  
45 GATCAGGATG GCTTCACAAG CCAGCTGTTG GGTTCCTAT GTCAGTGTGG CTCAGTCACA 60  
TCCCTGCGTG TAACTGTCT GCGGGGCACA TATGTATCCA TTTAGAGCTA AAGGAATCAG 120  
TGTACACTAC AGCTAATCCT AATAAATCCG ATGTTTTCGG AAA 163

50 SEQ ID NO:1886  
SEQUENCE LENGTH:159  
SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS02139

SEQUENCE DESCRIPTION:

5 GATCTAGCAG CATGCAAACA CATCACCTAA ACTACAAAAG AAAGGTCCTC ACTGTCTCTA 60  
 AAAAATAAAC TCATTAACCTT TGAGTTATTT GCAGACAGCC AAATCACCCA GGGCAACTTT 120  
 AAAGAGTCAG AAAATAAAAC TTTCCCGTTG TATGACAAA 159

10 SEQ ID NO:1887

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02140

15 SEQUENCE DESCRIPTION:

GATCATGGAG GAAAAAGGTA CTGGATAAAA GTAAACTTCA AACCTTAGGG CGGGANACTA 60  
 AAACCAAAAT ACATGTATTA TTTATAGAAA ATATTTTCTG TTTTAATCTT TTCTNTTTAA 120  
 ACAAGGACTC ATACTTAAAA AAATGTTTAG CAAA 154

20 SEQ ID NO:1888

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS02141

SEQUENCE DESCRIPTION:

30 GATCTCTGAT GACCTAACCT AAGCAAAACC ACTGAGCTTC TGGGAAGACA ACTAGGATAC 60  
 TTTCTACTTT TTCTAGCTAC AATATCTTCA TACAATGACA AGTATGATGA TTGCTATCA 120  
 AAATAAATTG AAATATAATG CAAACCATAA A 151

35 SEQ ID NO:1889

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS02142

SEQUENCE DESCRIPTION:

GATCTATATT CTTCTTAATT TTTATGGCTA TATTTAATGT TTTCCATCAT TGTGCCTTTA 60  
 AAAAGTATAT GTACATGTAT GCATAAATTT ATGTGAAGTT ATATATANGN NTCCGTATT 120  
 CCAGATTAAA GTTTATCTTT AGTAATCAAA 150

45 SEQ ID NO:1890

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS02143

SEQUENCE DESCRIPTION:

GATCAAAAAT ATGTGACCTT AATGAGATTT TTATGATTC TAAAGTAACA ATAAAAGCAG 60  
 TTTTATAGAGT TGAGTTCCAG AGAGGGCAGG GCAATGGCAG TNACATGTTT GTCATTTTAA 120

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TAATAAATAA CATCTATTGA GTNCTTAAA

149

SEQ ID NO:1891

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02144

SEQUENCE DESCRIPTION:

GATCCGCGGG GACCCTGCCG AGGGGGCTGT CATGCGGTTT CCAAGGTGCA CATTTNCCAC 60  
 GGAAACAGAA CTCGATGCAC TGANCTGCTC CGCCAGGANA GTGAGCGTGT AGGTNCCTGA 120  
 GGAATAAAAT GTTCCGATGA TGTGGAAA 148

SEQ ID NO:1892

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02145

SEQUENCE DESCRIPTION:

GATCCCCGTT CTTCAAGCTT CTCTGCTCAG TGTCTACTAA CGACCGACAT TTGCTAATGT 60  
 AAATAATAGT AAATNATTGA GAATTCTAAT TCTTTTACAC AGTCTGTTTT TAATCTATTT 120  
 TAATTAAATA AAATCTATGA CTCTAAA 147

SEQ ID NO:1893

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02146

SEQUENCE DESCRIPTION:

GATCTGGGAG TAAACTTAAC ATTCACGTGT TCTCTGCTCT GCATCCGCCA TTTGTGTGTG 60  
 TTTCTGGACT GTGGGCTGTG TGTACCTTGG TTGGTGACTC AGTGAGAAGA AGCAGGAATN 120  
 CCAAAGATAC TGTGAATNTT CTGAAA 146

SEQ ID NO:1894

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02147

SEQUENCE DESCRIPTION:

GATCTAAATG TCTAGTTTTG TATTCTTTTG TGTGTGTTCA CTGTTTCTCA GTATTACCAC 60  
 TTGAATAATT CTCTGTACAG GGGGGTTTGT GCTATACACT GGGATGTCTA ATTGCAGCAA 120  
 TAAAGCCTTT CTTTAAAAAG GAAA 144

SEQ ID NO:1895

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02148

SEQUENCE DESCRIPTION:

GATCTTGGAA ATGCTTGAAG ACCACAAGGC TGAAGAGTGC TTTGCTGGAG TCCTGTTCTC 60  
AGAGCTCCAC AGAAGACACG TGT TTTTGTG TCTTTAAAGA CTTGATGAAT AAACACTTTT 120  
TCTGGTCAAT GTCAAANNAA A 141

SEQ ID NO:1896

SEQUENCE LENGTH:142

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02149

SEQUENCE DESCRIPTION:

GATCCAGATA AACTTTCCTG TCATGTGTTA GAACTTTATT ATTATTAATA TTGTTAACT 60  
TCTGTGCTGT TCCTGTGAAT CTCCAAATTT TGTACCTTGT TCTAAGCTAA TATATAGCAA 120  
TTAAAAAGAG AGAAAGAGGA AA 142

SEQ ID NO:1897

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02150

SEQUENCE DESCRIPTION:

GATCAAAGTG TGGGATGNGC TGCAAGACGT AGAACCTACC TGCCCTGCCC CCGTCCCCNC 60  
CCTTCCTTAT TTATTCCTGC TGCCCCAGAA CATAGGTCTT GGAATAAAAT GGCTGGTTCT 120  
TTTGTTTTCC AAA 133

SEQ ID NO:1898

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02151

SEQUENCE DESCRIPTION:

GATCTAAGTT GCATCTTTAA TCCTGGTGGT CTGCTTCT GATTTTAAAT TTGTATCCTT 60  
TTCTATTAAAG ATATATTTGT CATTTTCTCT TGAATATGTA TTAATAATC CCAAGCAATC 120  
CAGTAACAAA 130

SEQ ID NO:1899

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02152

SEQUENCE DESCRIPTION:

GATCGAGGAG ATGCCCTCTG AACGCCTGTC CCGGAGCACC CGCCAGCGGG CAGCCTGTGC 60  
CCAGCTCAAC GACTTCCTCC AGGAGTATGG CACTCAGGGG TGCCAGGTCN TNAGGGCTGC 120



CCTCCACNN CCGCTGGGAG GAACCTNAAC CTGGGAACCA TGAAGCTGGA AGCACTGCTG 180  
 TGTCCGCTTT NATGAACACA GCCTGGGACC AGGGCATATN AAAGGCTTTT GGCAGCAAAG 240  
 TGTCAAA 247

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SEQ ID NO:1900  
 SEQUENCE LENGTH:132  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10

CLONE:HUMGS02153

SEQUENCE DESCRIPTION:

GATCTTCCTG CTACCTCTT GGATTCTAAG TGGTTCCAAG CTTAACTTGA GACCTTCCCT 60  
 TCAAACTAA AATTGGCAAA AAGTCACTTA AAATAGTGGA CTTCTGTAAT AAAGGTTGCC 120  
 TAAATAACA AA 132

15

SEQ ID NO:1901  
 SEQUENCE LENGTH:128  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

20

CLONE:HUMGS02154

SEQUENCE DESCRIPTION:

GATCTACAGG TTNCAATTCA ACCTGTTTCT AGGTTTTTTT GTAAATTTAG TTTTGATTAA 60  
 GCATTATAAG CATTTGAGTC TATAAACTTT ATAGTAGCAT CTTTCAGAAT AAACATTTTT 120  
 AATTGAAA 128

25

SEQ ID NO:1902  
 SEQUENCE LENGTH:132  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

30

CLONE:HUMGS02155

SEQUENCE DESCRIPTION:

GATCCATGAG TTGCCCCTGG TTTCAGTGGC CCAAGTGGTT TGTGCTAACC ACGTCTGTCT 60  
 TCACAGCTCT GTGTTGCCAT GTGTGCTGAA CAAAAAATAA AAATTATTAT TGATTTTATA 120  
 TTTCAGGGGA AA 132

35

SEQ ID NO:1903  
 SEQUENCE LENGTH:128  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

40

CLONE:HUMGS02156

SEQUENCE DESCRIPTION:

GATCCAAGAC AGAATAATGA ATGGACTCAA ACTGCCTTGG CTTCAGGGGA GTCCCGTCAG 60  
 GNCGTGAGG ACTTTTCGAC CAATTCAACC CTTTGCCCCA CCTTTATTAA AATCTTAAAC 120  
 AACGGAAA 128

45

SEQ ID NO:1904

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55

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02157

SEQUENCE DESCRIPTION:

GATCCACAGG GGTGGTGTCA AATGCTATTG AAATTGTGTT GAATTGTATG CTTTTTCACT 60  
TTTGATAAAT AAACATGTAA AAATGTTTCA AAAAAATAAT AAAATAAATA AATATGAAAC 120  
CTTAAA 126

SEQ ID NO:1905

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02158

SEQUENCE DESCRIPTION:

GATCTACAGA TGAATATTTA ACTCAATAGA AAAATTATTT TAGAACACAT TGTATTGGTA 60  
TTACAACCAG ATTATATTCT TGACGTTGAC TTCATTAAAA TTATCTACAA TTTCCTAATA 120  
AA 122

SEQ ID NO:1906

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02159

SEQUENCE DESCRIPTION:

GATCTCATGG ATACAAACAG GTGACCTTGC CAATTGGTGC TTTTGTGTG TTTAAGAAAA 60  
GAACAGTAGT AACCTTGCTC CCTGGNTACC AATAAAAAAT CTATTATTTT TTTAAAGAA 120  
A 121

SEQ ID NO:1907

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02160

SEQUENCE DESCRIPTION:

GATCTGACCC CTGTCAGATG NAAATGATTC ACAGCTCTGG CAGTTCCCAA GTCTGGGGAG 60  
GGGTATAGGT TTGAAAGGCT GTTTGAAAGA GGAATGTTTA ATAAAGGCTT TGATTAAAA 119

SEQ ID NO:1908

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02161

SEQUENCE DESCRIPTION:

GATCCAGCT GCCCCATATG TTGTGTTCTG NGA CTGAGGC CTTTGCTGTG AACTGCAGTG 60

TTTCATACGA ACCATCTTTC CTAGTGCATG AGAAATAAAG ATTATTTAAG TAATGAGGAA 120  
A 121

5 SEQ ID NO:1909  
SEQUENCE LENGTH:116  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS02162  
SEQUENCE DESCRIPTION:  
GATCTCACTT TTCAGGAAAC TTAATAATTA CCCATTATTG GGAAGCTTAA ATGAATTGAA 60  
GCTATGCAAG TCTTTTATAT TATTAAATAT TTAAGAAGTAA ACCTGTACTA ATCAAA 116

15 SEQ ID NO:1910  
SEQUENCE LENGTH:116  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS02163  
SEQUENCE DESCRIPTION:  
GATCGATATG CTCATAAAAG TGCTCAATTA TATTTNCTGT ATTTTGTATG NTGTATTTTC 60  
CAAGACGTAT ATTATTTTAC TATTAAAGAA AAAAATCATT TTTTTTCCC GAGAAA 116

25 SEQ ID NO:1911  
SEQUENCE LENGTH:124  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
30 CLONE:HUMGS02164  
SEQUENCE DESCRIPTION:  
GATCCGGGCA TGGGAGACCC CACTTTAGAA AGGGTCGTCA CTCCTTTAAT CCTCTACTCA 60  
ACAATGTACT CTTTACTTT TATATTAAAA AAAATAAAAT AAATATGTGC CTAAACCTC 120  
CAAA 124

35 SEQ ID NO:1912  
SEQUENCE LENGTH:115  
SEQUENCE TYPE:nucleic acid  
40 TOPOLOGY:linear  
CLONE:HUMGS02165  
SEQUENCE DESCRIPTION:  
GATCCACTTC TACTTAATGA GTAGTAAATA TATTTCTTTT TCCTTATGAT TTTCTTACTA 60  
TTTCTTTAG CTGCTTTAT TATAAGANTA TAGCATATAA TATAAATAAA ATAAA 115

45 SEQ ID NO:1913  
SEQUENCE LENGTH:112  
SEQUENCE TYPE:nucleic acid  
50 TOPOLOGY:linear  
CLONE:HUMGS02166

55

## SEQUENCE DESCRIPTION:

GATCCAGAAA TTGTGAACAA TGTTTGATT AGTAGCGTGA CTGCGCTTC CCTTTAAAA 60  
 CATCTTTTAC AAATCTGTCT TGGAAATAAG TCTATTTTCT GCCTTTTGA AA 112

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SEQ ID NO:1914

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS02167

## SEQUENCE DESCRIPTION:

GATCCTAATT GCCTAGAAAT ATCTTTCTCT TACCTGTTAT TTATCAATT TNCCCAGTAT 60  
 TTTTATACGG AAAAAATTGT ATTGAAACA CTTAGTATGC AGTTGANNNN GN 112

15

SEQ ID NO:1915

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS02168

## SEQUENCE DESCRIPTION:

GATCAACCGT GAAGCGTAAC AAATCTGTA TTTAGTTTT TTTCTGTTG TGGTGGTTTT 60  
 TGTITGTTT TTTGTTTTG TAAGATTCTA AATAAATNAA ATACGAGTCA AA 112

25

SEQ ID NO:1916

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS02169

## SEQUENCE DESCRIPTION:

GATCAAGACT NCAGTTTGGG AATGCATGGA CACCGGATT GTTCTTATT CCTTCACTT 60  
 TGGGGAAAAT CTCNCCNTNT TAAAAAGTG ATAAATTGG TGTTAGGTCA AA 112

35

SEQ ID NO:1917

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS02170

## SEQUENCE DESCRIPTION:

GATCAACGCG ACTGTATTT GAAACATTCC AGGAAGGTTA CTTCTTGTC AACTTGCCTG 60  
 GCAGTGTTG TTCAAANCTT GTATTTAATA AATGANCATC TGACTTTACA AA 112

45

SEQ ID NO:1918

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS02171

55

## SEQUENCE DESCRIPTION:

GATCTATCTT AAGAAGTGAC CAGGAAAGAG GTTCATTGAA ATAATCATGC ATGAAGCGCC 60  
 AAAGATGCAC CATGTAGAAT TTTCACITTTG TACTGGCAGG CTCGTTTTAC CTGATTCTAG 120  
 AATATTAAAG AATCTAAAAA TAAAGGGCAA CTCTGACTTA AA 162

SEQ ID NO:1919

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02172

## SEQUENCE DESCRIPTION:

GATCAGGGAA CTAAGCATTG TGTGAATTCA CCAGCAAGAT GTACAGNACG CCTGTNTTTA 60  
 CATTGTTTTT ATGGAAGTAG CAGAATAAAN CATCTATTTT AAAAATGCAA A 111

SEQ ID NO:1920

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02173

## SEQUENCE DESCRIPTION:

GATCTCGGAG GAAGCCGCCT ACTCCAACCC CAGCCTACCT NTGGTGCACA NATCCGTCCC 60  
 ATAGCAAAGC CCCTGCACAG ACTCCAGCCG AGCCCACACC TGGNTATNAG GTGGGCCAGC 120  
 GGAAGCGCCT CATCTCCTCG GTGGAGGACT TCACCGAGTT TNTNTGAGGC CGGGGCCCTC 180  
 CCTCCTGCAC TGGCCTTGGA CGGTATTGCC TGTCAGTGAA ATAAATAAAG TCCTGACCCT 240  
 AGTGCACAGA CATAGAGGCA CAGATTGCAG TCAAA 275

SEQ ID NO:1921

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02174

## SEQUENCE DESCRIPTION:

GATCAGGACA GAGACTTGGG GGCCATCCTG CCCCTCCAAC CCGGACATGT GTACCTCAGC 60  
 TTTTCCCTC ACGTTGCATC AATAAAGCTT CTGTGTTTGG AACAGNTAAA CAAA 114

SEQ ID NO:1922

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02175

## SEQUENCE DESCRIPTION:

GATCCCAAGC NTCCCGTCCC TTGGAAAGTN CAGCCAGAAT CTNCGTCCTG ACCCCCGACA 60  
 GCCCAGCCTA GCCCACTTGT CATCCATAAA GCAAGCTCAA CCTTGAAA 108

SEQ ID NO:1923

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02176

SEQUENCE DESCRIPTION:

GATCCCCCAG GTTCAGACTG AGCTCCCCCT TCCCAGTAGC TCTTGCATCC TCCTCCCAAC 60  
TCTAGCCTGA NTNCTTTNCA ATAAAAAATA CAATTCAAGT TGCTTCTCAT GGATGGCACT 120  
GCTTTCCTGA GGACTCAAGG TGCCAAGATG GAGGGGCTGA CTCAGTCCAG CCAACNTTAA 180  
ATGAGNACCT ANNNGGTGTA TGGAGCTCTA ACCCATGGGT CCATGGGAAT AAAGCAGTGA 240  
ATAGTAACAA TAAATAATTG TAACAGCANA AA 272

SEQ ID NO:1924

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02177

SEQUENCE DESCRIPTION:

GATCTGACGT TTTCTACGTA GCTTTTGTAT TTTTTTTTTT TAATTNNAAG GAACACTTAT 60  
GAAGCCCTGC CATNCCCCTC CCGNGTCTAA TAAAACGTAT AATCACAAA 109

SEQ ID NO:1925

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02178

SEQUENCE DESCRIPTION:

GATCAACTTG TGCTTGCCAG AGGACGCCAA TGAAGTTGA AACACCAACA ATCAGAGATT 60  
TTGTTTCTGT TCCTCATTA ATCATGAGCT TTTGTGCCGA GAAA 104

SEQ ID NO:1926

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02179

SEQUENCE DESCRIPTION:

GATCGTGTGT GTAGGTGGTG TTGTGTGGTT TTCCTTTGTG AAGGAGAGAG GGAAACTATN 60  
TGTAGCTTGT TTTATAAAAA ATAAAAAATG GGTAAATCTT GAAA 104

SEQ ID NO:1927

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02180

SEQUENCE DESCRIPTION:

GATCCTCCA CTTCACCTC CCAAGTAGCT GTGGCTACAG GTGTGTGCCA CCATGTCCAG 60

CTGATTTTNG TATTTTNAGT AGGGACAGTA TTTCTCCATG AAA

103

SEQ ID NO:1928

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02181

SEQUENCE DESCRIPTION:

GATCTAAATC TCATTTTATG CTGTATTTTA TATCTNAGTT GTNTTTGAAA ACGTTTGTAT 60

TTTTGGAAAC ACATCAAAAT AAATAATGGC GTTNTTTGTA TGCAAA 106

SEQ ID NO:1929

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02182

SEQUENCE DESCRIPTION:

GATCTGGACG AATGATACCA AACGTTTCTT TCTAACATTG TATTTTATAA CTCTGGCCTA 60

TGATTGTNTT GTGTCTTGCA TTAACAAAAA AAATTTGAGA GTGGTAGAAT TACTTCTGTT 120

ATCTGAAATA CCTGAGATGC ACTTTAACT GTTGAAATGT AAGCNCCTGAG GGCAGGGNCC 180

GTATCTNATT TACTGTAGT ATCCGTTGCA TCTAGTGTGG TGCACCTGGC ACACAGTAGG 240

CACTCAATAA ATATGTATTG ATTAANCA AA 272

SEQ ID NO:1930

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02183

SEQUENCE DESCRIPTION:

GATCTACAGC TCCTGGATAA TTGCTTGATT CTCGCCAGAG ACTGTCAATA TTTNATTCAT 60

TGCCATTACC AATAAATCAT TGCTTTTGTT NAGATGGTAT CACTAGTGTT TCCATTGTAA 120

TCTTGACACA TGCAATTGTA AATAAAGTC ACCACTTTTG CCAAGCTTAA A 171

SEQ ID NO:1931

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02184

SEQUENCE DESCRIPTION:

GATCATACCA CTGCACTCTA GTCTGGGTGA CAGAGCGAGA CCCTGTCTTG AAAAAATAA 60

ATAAAAAATAA AAAAAATAA AACTGGCACT ACGTTTAA 99

SEQ ID NO:1932

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS02185

SEQUENCE DESCRIPTION:

5 GATCTGTGTC TTA AAACTTA CTGGAATGGA AATCTATGAA TTATTGCAAA TTGTAATGCT 60  
GGAAACAAAA AATAATCCT TGGTTAAAGG GTTTGTAAA 99

SEQ ID NO:1933

SEQUENCE LENGTH:99

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02186

SEQUENCE DESCRIPTION:

15 GATCCTGACA CTCTANCACT CGACTCTGCT GCTCATGGGA AGAACAGAAT TNCTCCTGCA 60  
TGCAACTAAT TCAATAAAAC TGTCTTGTGA GCTGATAAA 99

SEQ ID NO:1934

SEQUENCE LENGTH:90

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02187

SEQUENCE DESCRIPTION:

25 GATCTTGACT TATATTCTGT ACCACATACA CTTCTGTGGA CTTTtagcat TTGTGGGTAG 60  
ACTTAATAAA GCATGTATAA AAGTGGCAAA 90

SEQ ID NO:1935

SEQUENCE LENGTH:91

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02188

SEQUENCE DESCRIPTION:

35 GATCAGGNTG CGGATAGACT TGTAAGGGTG TTTGCTGCAT ACAGTGTAAG CATTGTGACC 60  
GCCAATAANC TTCAATGGTT TCTACTGNAA A 91

SEQ ID NO:1936

SEQUENCE LENGTH:91

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02189

SEQUENCE DESCRIPTION:

45 GATCTTTCGT NTTTCTAAGC GACTCTACTT TCATTGTTG CCAGCNTAGC TCGTTGCTGT 60  
TGCCCAATAA AGCTNGTGTA CGTNCTGCAA A 91

SEQ ID NO:1937

SEQUENCE LENGTH:86

50 SEQUENCE TYPE:nucleic acid

55



TOPOLOGY:linear

CLONE:HUMGS02191

SEQUENCE DESCRIPTION:

5 GATCTTACAT CTGCAGCTCT TTCTTCTTTG AATTCCTAT CTGTATGTCT GCCTAATTAA 60  
AAAAATATAT ATTGTATTAT GCTAAA 86

SEQ ID NO:1938

SEQUENCE LENGTH:86

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02192

SEQUENCE DESCRIPTION:

15 GATCATCAGT GTTCCTTTTT ACTTATAAAG TTGGATTCTT TTTTAGAATT TGTAATAAAAT 60  
AAAACTGCT GCTTTACCAC TGTAAT 86

SEQ ID NO:1939

SEQUENCE LENGTH:91

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02193

SEQUENCE DESCRIPTION:

25 GATCTACCCT GCCTGTACTA CTCTAGGGAG TATGCTGGAG GCAGAGGGCA AGGGAGGGGT 60  
GGTATTAAAC AAGTCAATTC TGTGTNGTAA A 91

SEQ ID NO:1940

SEQUENCE LENGTH:84

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02194

SEQUENCE DESCRIPTION:

35 GATCATGAGT GACCCAGCTG TCTCAGTTG TTTATTCTGC GTCCCTTCT CCAATAAAAC 60  
AAGCCAGTTG GCGTNGTTA TAA 84

SEQ ID NO:1941

SEQUENCE LENGTH:79

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02195

SEQUENCE DESCRIPTION:

45 GATCCCCATG CCTAGCAGAG TGCTGGCACT TAGTAGGTCC TCAATAAATA TTTATTAAAT 60  
GATGAGATGA TGGAGCAA 79

SEQ ID NO:1942

SEQUENCE LENGTH:78

50 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS02196

SEQUENCE DESCRIPTION:

5 GATCCAATCC CATAGACAGC TCTGGGCCTC TTGCATTGA GTTTTTTGA ATTAACTGC 60  
AGTATTTTGG AAAGCAAA 78

SEQ ID NO:1943

10 SEQUENCE LENGTH:77

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02197

SEQUENCE DESCRIPTION:

15 GATCCACTAA GGAAATGTTT TAACAGCTAG AGACCACTGC TTGCCTGAAA GGGCGTTCTT 60  
AAATTTGGTG CAGCAAA 77

SEQ ID NO:1944

20 SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02198

SEQUENCE DESCRIPTION:

25 GATCCACTTC AAGAATTGCT TGCTTTCAGG AAGAGAGATG TGTTTCAACA AGCCAACTAA 60  
AATATATTGC TGCAAA 76

SEQ ID NO:1945

30 SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02199

SEQUENCE DESCRIPTION:

35 GATCGACTTT GTGTCTCTGT TGTCTAAAAT AGGTTTCCG TGTTCTGGAC ATTTCATATA 60  
AATGGAATCA CACAAA 76

SEQ ID NO:1946

40 SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02200

SEQUENCE DESCRIPTION:

45 GATCATAGAT TTCTGATTTT ATGTAAAATT TTGCCTAATA CATTAAAGCA GTCACTTTTC 60  
CTGTGCTGTT TCAAA 75

SEQ ID NO:1947

50 SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear  
 CLONE:HUMGS02202  
 SEQUENCE DESCRIPTION:  
 5 GATCTGTCAA AGAAACTTC CAAAAGATT TATTAATTAA ACCAGACTCT GTTGCAATAA 60  
 AAATCCTACA GAAA 74

SEQ ID NO:1948  
 SEQUENCE LENGTH:73  
 10 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02203  
 SEQUENCE DESCRIPTION:  
 15 GATCCACTTT AGCAAACCTT GCTGCAGAGG ACTGTAAAA CAAATAACTA AAAATAAACT 60  
 TAGAAAATAC AAA 73

SEQ ID NO:1949  
 SEQUENCE LENGTH:73  
 20 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02204  
 SEQUENCE DESCRIPTION:  
 25 GATCGTAATG TTTATCATGT TACTTCCCCA CCCCTACATT TTTTGAAATA AAATAAGGAA 60  
 TTTTATTCTC AAA 73

SEQ ID NO:1950  
 SEQUENCE LENGTH:72  
 30 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02205  
 SEQUENCE DESCRIPTION:  
 35 GATCNCCTGCA ACTAAGNTTA AAGCAGTGTG ACTGTGTTGC TNAATATCA AGTATTGTTT 60  
 ATAACCACCA AA 72

SEQ ID NO:1951  
 SEQUENCE LENGTH:66  
 40 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02206  
 SEQUENCE DESCRIPTION:  
 45 GATCTCAGCT ATTAAGATGC AAGTCTGCCA ATGCTCCTGG CCAAATAAAC CTCTTCCTTC 60  
 TTAAAA 66

SEQ ID NO:1952  
 SEQUENCE LENGTH:65  
 50 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS02207

SEQUENCE DESCRIPTION:

5 GATCCTCTTG TACTGGGAGA GGTGCCTTTT GTATCCCCAA TTAAAGGTAG AAAACCACCC 60  
TGAAA 65

SEQ ID NO:1953

SEQUENCE LENGTH:62

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02208

SEQUENCE DESCRIPTION:

15 GATCTCGAAG AAAAAAGGGG GAGACCAAAG AATAAAGAA GGGTTTCCCC ACTAAATGA 60  
AA 62

SEQ ID NO:1954

SEQUENCE LENGTH:62

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02209

SEQUENCE DESCRIPTION:

25 GATCCAGCTG TNCTTAAGAG CCAGTAATGT CTTAATAAAC ATGTGGCAGC TTTNNTTGA 60  
AA 62

SEQ ID NO:1955

SEQUENCE LENGTH:61

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02210

SEQUENCE DESCRIPTION:

35 GATCTCATAT TTCACCCAG GCTCAACTGA GGATGTGGCT TATTAAACAC GGAAGTGCAA 60  
A 61

SEQ ID NO:1956

SEQUENCE LENGTH:59

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02211

SEQUENCE DESCRIPTION:

45 GATCAGCCAT GTNTATCTTT TAAAAAATA AACAGGTTGC TTTATTTCTT AGCTTCAAA 59

SEQ ID NO:1957

SEQUENCE LENGTH:59

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

EP 0 679 716 A1

CLONE:HUMGS02212

SEQUENCE DESCRIPTION:

GATCAGATGA GATTTAATGA AGACCCAGTG TAAAGAATAA ATGANTCTTA CTCCTTAAA 59

5

SEQ ID NO:1958

SEQUENCE LENGTH:57

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS02213

SEQUENCE DESCRIPTION:

GATCTACACC TGGACTGCCC AGGTCTATAA GCCAATAAAG CCCCTGTTTA CTTGAAA 57

15

SEQ ID NO:1959

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS02214

SEQUENCE DESCRIPTION:

GATCGAAGAA AAAGGGGNGN CAAAGAATAA AAGAAGGGTT TCCCACTAAA ATGAAA 56

25

SEQ ID NO:1960

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02215

SEQUENCE DESCRIPTION:

30

GATCAGAAAT GTTGANTGTG CATTGAGTAT TAAAAAATTA GATGTATATT ATNCATTGTC 60  
CTTTACTCAT GAGTACCTTA TAATANTANT ANTGTATTCT TTGTTAACAA A 111

35

SEQ ID NO:1961

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02216

SEQUENCE DESCRIPTION:

40

GATCTATTCC CCATCCCAAG GCAAGCATGA ATAAAATTAG GTTAAACGTA GCATGTGGCA 60  
TCGCAGTCTC TTAGAATTG TTTCATCTAT TTNATTTTAT TGAATACTGT CTGTATCTTT 120  
GGTTATCCTG TTTGAAGAAA AAGGACAAAT AAAACATGGC CAGCAAA 167

45

SEQ ID NO:1962

SEQUENCE LENGTH:516

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02237

50

SEQUENCE DESCRIPTION:

55

5 GATCCTCATT CTCACCCATT TGGCTAATCC AGGAATATTG TTATCCCTNA NCCATTATAT 60  
 TNAAGTTGAG AAATGTGACA GAGGCATTTA GAGTATGGAC TTTCTTTCC TTTTNCCTTT 120  
 NCTTTTTTCC TTTTGTAGAT GGAGTCACAC TCTCCAGGCT GGAGTNCAGT GGCACAATCT 180  
 CGGCTCACTG CAATTNCCGT CTCCCAAGTT CAAGCGATTG TCCTGCTTTA GACTATGGAT 240  
 TTCTTTAAGG AATACTGGTT TGCAGTTTTG TTTTCTGGAC TATATCAGCA GATGGTAGAC 300  
 AGTGTATTATG TAGATGTGTT GTTGTTTTTA TCATTGGGAT TTAACTTGG NCCGAGTNAA 360  
 ATAATCAGGT TTTTGTCACT CACACTCTCC CCCAGTTTTT GGGAATAACT TTGGAAGGTA 420  
 10 AGGTTCAANTN CCCTAAGGCC GGTGGGGTTN CTGTTGGACC TATGGGGGGN CCACAACGTN 480  
 ACTATTTAAT TCCNCCCAC TGTAAGGGGC AAAGGN 516

SEQ ID NO:1963

SEQUENCE LENGTH:483

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02238

SEQUENCE DESCRIPTION:

20 GATCTTTCCA GATGACTTGT CCAAGGTCAC ACAGGAGTCA GATGGCCTTT CCACTACCCC 60  
 ACAACACAGA TGCATAGTTA CTCTGTGGGC TAATACAATT CAGAATTCAG AGCTCTGCCC 120  
 ATGGTCACCG GTGGAATCCA CCAGCCATCT CCCTGACCTT GCTCTCCTCT GTTCTCCTCG 180  
 TCTCCAGGGT CCCATGATTC AGGGCGAGCT GGCTTCAGGA TGTGGGCAAG AGGGGTTTTA 240  
 GATGGAAGGG TTTTCTCCA GGACAGAATG TTAAGCCAAG CCTGGACTTA ATTGTTCCAA 300  
 25 GATGTGCTTA GAATTGGTGG ACAATTTTTT TTTAATGATT AGCAAAGGAC AAGGCTTTTG 360  
 GTGGTCATTA GTATTGTCA TCAAATATTC CAGTTCTCCA CAATTCTGGG GTACCATGGT 420  
 ANGGATGAAC CTTCCCTGTC TTTTCAGGGT TAAGTTAGC TCTNGTGATG TGCTTTTGTC 480  
 AAA 483

30 SEQ ID NO:1964

SEQUENCE LENGTH:452

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS02239

SEQUENCE DESCRIPTION:

40 GATCGCTGGA GCTGTGGTCG CTGCTGTGAT GTGGAGGAGG AAGAGCTCAG ATAGAAAAGG 60  
 AGGGAGCTAC TCTCAGGCTG CAAGCAGTGA CAGTGCCAG GGCTCTGATA TGTCTCTCAC 120  
 AGCTTGTAAG GTGTGAGACA GCTGCCTTGT GTGGGACTGA GAGGCAAGAT TTGTTCTCTG 180  
 CCTTCCCTTT GTGACTTGAA GAACCCGTGAC TTTGTTTCTG CAAAGGCACC TGCATGTGTC 240  
 TGTGTTCTTG TAGGCATAAT GTGAGGAGGT GGGGNGACCA CCCCACCCNN ATGTCCACCA 300  
 TGACCCCTCTT CCCACGNTGA CCTGTGCTCC CTCCCAATC ATCTNTCTCTG TTCCAGAGAG 360  
 GTGGGGCTGA GGTGTCTCCA TCTCTGCTC AACTTCATGG TGCCTGAGC TGTAACNTTT 420  
 45 TCCTGNNTAT TAAAATAAGA CCTGAGTTTA AA 452

SEQ ID NO:1965

SEQUENCE LENGTH:433

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS02240

SEQUENCE DESCRIPTION:

5 GATCAGACAC CAGAGGGTTG GGCATTCTTG CAATACCTTA ACAGTGCTGA AATCTGCAGC 60  
 ATGGTACTAA GGAAGTTAAA GTTTGAATGT AACCACCTTA TTTAAAAGGT TTTTTCCTT 120  
 AATTAAATG AAATGGTGGT TGAAGTGAAC ATGATTTTGT TGACCATGTT CGTGAATTAC 180  
 AGATGCAACA TGCATTGGTA GAATCGTGTG ATGGTCTTTT GTGATACTTA ATTTTACAT 240  
 ATCCCACTCT CTGTATGTAT CTGCATAGAC AAAGAAAAA CAACTCCTG CTTTGCTTTT 300  
 ATTGAANGG TTTCCAGGAC TGCCTGTCTG CTCCTGAGCT CTGTTTAAAG TATGTGTATC 360  
 10 CTTTGCTTGT ATTTTGAAT TAAAAAATA AGGAAAAGGA NGCCTTTATT TGTGGNGCA 420  
 TGTGGCATT GTN 433

SEQ ID NO:1966

15 SEQUENCE LENGTH:424

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02241

SEQUENCE DESCRIPTION:

20 GATCTGCAAA GAAAGCTTTT CTTCNGTCGC TGCCTCAGNC TCCTCCCTAT GCCTCTNGCA 60  
 CCTGCGCAGA AGTGCTGGCT GTGCTGANGT CACCATCATC TTCCTCTCCC CCAGCCTCCC 120  
 AGGCTGGATG GCATGGACTG TTTGCTGACC TCTGTTCTCT TAGGGCATGG GAGGTGGGAG 180  
 GATATCAAT TCTNTAGCCC TTTCTCCTA TTCTCCCAAG NAGAGAGNTT CCCATTCTC 240  
 25 CTCGGCCATT GTACCTAGCT CTTGTCCCTA GCTGCATTTC AGTGGACCAT GGATAGAGGG 300  
 ACTGAGNGTT AGACGGGGAA GACTGGCAGN GAGGCACGCA GGTACTGTGA AAATCCTNNC 360  
 CTTTGACCTC CNCCAGTGGG AGAGGGGNGT TGGGGTTTTC AATGTGAGAA CAGNAACAAA 420  
 TAAN 424

30 SEQ ID NO:1967

SEQUENCE LENGTH:418

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02242

SEQUENCE DESCRIPTION:

35 GATCNCCTGC TCTCCAAGCA TGGCATCTAT GTGCAGGCCA TCAACTACCC AACTGTCCCC 60  
 CGGGGTGAAG AGCTCCTGCG CTTGGCACCC TCCCCCACC ACAGCCCTCA GATGATGGAA 120  
 GATTTTGTGG AGANGTGCT GCTGGCTTGG ACTGCGGTGG GGCTGCCCT CCAGGATGTG 180  
 40 TCTGTGGCTG CCTGCAATTT CTGTCGCCGT CCTGTACACT TTGAGCTCAT GAGTGAGTNG 240  
 GAACGTTCTT ACTTCGGGAA CATGGGGCCC CAGTATGTCA CCACCTATGC CTGAGAAGCC 300  
 AGNTGCCTAG GATTACACCC CCACCTGCGN TTAAGTTGGG TCCAGGCCTA CTCCTGTCTT 360  
 CTGCTTTGTT GTGTGCCTCT AGCTGAATTG AGCCTAAAAA TAAAGNACAA ACCACAAA 418

45 SEQ ID NO:1968

SEQUENCE LENGTH:413

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02243

55

## SEQUENCE DESCRIPTION:

GATCATTGAA TAAACGGGT GTAGAGTACA GGAATGGGGC AGACGGGATT CAGGTGAACA 60  
 GCACANGNAG AATATGAGGT GGTTCCTAGG AGCAACACTT TCGACCTCCA GTTCTCCNTG 120  
 ATGACAGTAG CTGTCTCCNN GNGAAAAATC CTCACTTATT AACTCTCTTT TCTTGCATCT 180  
 CATTTTATA GAGCTACTCA TCCTTATTTG GAAAAACCA CAACAAAAA GGCTTTTAGA 240  
 AAATGGTTGT AAATCTGACT TCTTTGCAAG TAACTATGTA TATTGTAAAT AGGATATAAA 300  
 AAGGCCTTTT TTCTAAATAA GGCCTTAACT GCCTGTAACA TGAACCTCA AACTAAACCA 360  
 CTTAACTCAN TGNACTACCT TATGGGTTTG TCTGACATCC CTCAACTTAC CAN 413

SEQ ID NO:1969

SEQUENCE LENGTH:412

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02244

## SEQUENCE DESCRIPTION:

GATCCCAACCG AGAAGAACCA TGGGTGGACC CGAACTCCCC GGTGCTCTNA GAGGACCCAN 60  
 NNCTTTGTGC CTGGCAAAA AAGCACAAGC GAACCCACGC CCTGATTGCC CTGCGCTACC 120  
 AGCTACACCG TGGGGTTGTG GTCCTGGCCA AGAGCTACAA TNAGCAGCGC ATCAGACAGA 180  
 ACGTGCAGGT GTTTGAATTC CAGTTGACTT CAGAGGAGAT GAAAGCCATA GATGGCCTAA 240  
 ACAGAAATGT GCGATATTTG ACCCTTGNTA TTTTGTCTGG NCCCCCTAAT TATCCATTTT 300  
 CTGATGAATA TTAACATGGA GGGCATTGCA TGNGGGTCTA CCAGAAGNNC NTNGGGTNTT 360  
 GGANTGGTNG CANAAGNGGG TNGTTCCTTA TGGCTGGGGG NACTTGGGCA AN 412

SEQ ID NO:1970

SEQUENCE LENGTH:406

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02245

## SEQUENCE DESCRIPTION:

GATCCAAAGT TCATACATTT TATGTACAAG ATACATTAGA CTTACAATAN AGTCTAATTA 60  
 TTAGACTTTT ATGTCAGTGG ATTGTGCTTG CAGAAATACA GAAGTAACAT ACTGACCCTA 120  
 GGTGAGGAGT TTCTTACATG GTTAACTGGA TTGACCCAAT TGGAGTAAAA GATTTTGTCT 180  
 GTTACCTCGA TGCTCTGCA GTTGTTACCT CAGCATGCCA CTGTAGTCCT TGACTCTCAC 240  
 ATTAATACTA ACTTTGGCTA GGTACTGGTG GCTCACACCT GTANGTAATC CCAGTACTTT 300  
 AGGAGGCTGA GACTGGAGGA TTAATTGAGT CCAGGAGTTG GAGACCAGCC TGGCCAATAT 360  
 AGACTGTCCC TACAAAGGAA AATAAANTTT GTTTCATCTT TCNAAA 406

SEQ ID NO:1971

SEQUENCE LENGTH:401

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02246

## SEQUENCE DESCRIPTION:

GATCAATAT GGCATCAACA ATATCCGGGA GCTGGTGGGC CACAAGGTGA ACCTGCAGAT 60  
 GGTGTATGAC AGTCCCCTGT NCCGCCTGGA TGCCGAGCCG AGGCCCCCTC CCACACAGGA 120



GGCTGCGTGA CATGGGCCAC TCTAGGACAG GTCATCCTCC CCGAGTCCCT GCTGCTGCGC 180  
 TCCTTTGCAT CCCTGGCCAG TNACCTTGTA TTTATGAGGC CTCTGTNAGG CAGCCCCCAC 240  
 CTCCTCTTT CCCACCTGTC CCAGGACCAG AATCCCAGGG ACAGAGGACT GGGTAGCAGG 300  
 TTCCTTCTGT TGTCTGTGT GGTGTGTCTA CTGTGAGGGT GGGCCCTGAG GAGACCTGTG 360  
 GGCCANCTAT TGTCTAATAA AGTGGGGCAG TTGCCCCCAA A 401

SEQ ID NO:1972

SEQUENCE LENGTH:384

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02247

SEQUENCE DESCRIPTION:

GATCTTTNAT GTTGTNATT TTGGAGAGAA GCACAAGGAG TATTCTCTTT CTAGGGAAAG 60  
 TTGTGAACCC AACGGAAGCG TAGTTGGGAA AAAGGCCATT GGCTAATTNC ACGTGTGTAT 120  
 TGCAATGGGA AATAAATAA TAATATAGCC TGGTGTGATT GATGTGAGCT TGGNCTTGCA 180  
 TTCCCTTATG ATGGGATGAA GATTGACCCC TGGCTGACCT TTNTTGGCTG TGGAAAGAGGN 240  
 CAATCCTATG GCAGAGCATT CAGAATGTCA ATGCGTAATT CATTATTATC CAAAGCATAG 300  
 GAAGGCTCTA TGTNTGTATA TNCCCTNTG TCGGAATACC CCCTTANCTC ATTTCCNCT 360  
 TAATAAAATT CACTGGGTTG NAAA 384

SEQ ID NO:1973

SEQUENCE LENGTH:383

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02248

SEQUENCE DESCRIPTION:

GATCCTGCTT CTCCTCTGGG GTCTTCTTGG TTCCCTGAAG CCCCTCTTCC GGAGTCCCTG 60  
 CCCTCTATCG GCTCTGCCTC CTGCTTCTTT TCTGTATTGC CATGATTTT GCTAAGGATA 120  
 AAGGACAAC TCAATGGCTT CTTTGGGAAA CTGCAATCT CCCCACACAG GCCCCTCTGA 180  
 GATTCTCTCT TTTGCCACCT TCGATATTT CTCCAGTTTC CTTGATTCTT TTGATACGTC 240  
 CCCATTGAGG CCACTCTGGC CTTCATCCA ACCTGCCAGA ACTTTTCCCA CTTCAGCACT 300  
 TCAGTCACCT AACATTAGG GCTCCCTGCC CTAAAGGGAC TCAAAATCCT GCAAAANCA 360  
 CCACNNAAGG ATAAAAAAT AAA 383

SEQ ID NO:1974

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02249

SEQUENCE DESCRIPTION:

GATCAACAGG AAGAACATGG TGGTCTCCTT TGGAGATGGG GTTACCTTCG TGGTCGTCCT 60  
 ACACCAAGGTG TGAAGAAAC ATCCTGTCCA CCGTGACTTT CTAGGCTTCT ACGTGGTGGA 120  
 CAGTCACCGG ATGTCAGCAC AGACGCATGG GCTGNTGGGG CAATTCTTCC AACCCITTGA 180  
 CTTTAAAGTG TCTGACATCN GGCCAGGCTC TNACCCACA AAGCCAGATG CCACATTGGT 240  
 GGTGAAGAAC CATCANGNTG ATTNTNACCA GGGGCTCCCN GAAAGANTAC AGNAAAGGNA 300

TGCCANGCAT CGGCACGAAN GGTGTCTTC TTGGTTCGNN CACANCAACG GGAATGTTG 360  
TTGNTTGANT GGTGN 375

5 SEQ ID NO:1975  
SEQUENCE LENGTH:370  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02250

10 SEQUENCE DESCRIPTION:  
GATCTATGTG CACACACCCN CATCACATGG AATGGGCTGG TCTAGGCTGT GGCCTGNAC 60  
CTTCCTTAGA GTGAATAGGG CGGACACTCC TCTCTTTCC TGTAGCGTGT GGACCGGTCC 120  
ACGCCAATTCT TTATCCTGTG AACTCATCTG AGTGGGAGGT GGTGGACACT GGGGTTTCCT 180  
15 TCCCTCTCTC CGTAGCATCC GTTGGTCTTT CTCTCCATCT CTGTTGGTTT GTCTGTCTCT 240  
GTCTTCCTCC CAATCCCTAG GGAAGGGGG CATTGGGCTA GGGGGTGCCC CTGTGAGCCT 300  
NGACCTTGCC CCCTCGTCCN TCTCCCCAGT GTTCCAGGA CCCCCAATA ACCTTGTCCT 360  
GTCAGTCAAA 370

20 SEQ ID NO:1976  
SEQUENCE LENGTH:367  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02252

25 SEQUENCE DESCRIPTION:  
GATCGATACA GGGGAGGGGG GAGGTGAAA CAAACAACAA AACTGTACAT TTTTTTAAA 60  
GTTTGTGAA AAGAATATTG TCTTATTCTA TAAACATTT CAAACCTAGT TAGAGATTG 120  
TAATCAAAAA ACATTGCGC AGAAAGCAGC ACTTAGGGCT GCCTGTTCTA TACCCTACAG 180  
30 TCAGACAGGA AAAGANCTGA AAATGGCACC CTTCTGACAT TCTGNGGCAG CTGGNCTNGC 240  
AGCCANGTAA NGNGAGTTT ATGAGGTGGT GTGGGGAGGG TGGGGGAGGC NGCGTGGGGG 300  
NTTCTCTCCA CAGCAGGTGG GNGCAGGCAA GNNTTTGGNG GCCAGANGGN GNGCTTTGTN 360  
CNTGGGN 367

35 SEQ ID NO:1977  
SEQUENCE LENGTH:353  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02254

40 SEQUENCE DESCRIPTION:  
GATCTCCAGC CTTACCGCGG CTGAAATGG ACCCCAACCTG CTCCTGCACC ACTGGTGTCT 60  
CCTGCGCCTG CACCGGCTCC TGCAAGTGCA AAGAGTGCAA ATGCACCTCC TGCAAGAAGA 120  
45 GCTGCTGCTC CTGCTGCCCC GTGGGCTGTG CCAAGTGTGC CCACGGCTGT GTCTGCAAAG 180  
GGACGTTGGA GAACTGCAGC TGCTGTGCCT GATGTGGGAA CAGCTCTTCT CCCAGATGTT 240  
AATAGAACAA GCTGCACAAC CTGGATTTT TTTTCAATAC GATACTGAGC CATTGNGC 300  
ATTTCTTTT ATGTAAATA TGTGAGTGAC AATAAAACAA TTTTGAATTG AAA 353

50 SEQ ID NO:1978

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02255

SEQUENCE DESCRIPTION:

GATCTNACCT GAGGTGCTGG GTGAGAAATC TTAGGGACCA GATGGAAGAG GGCCTGTNTA 60  
 TANNGACATT AGGAAGGAGG TTTGGGAAGG TTTGGGAGGG CAGCCTGACT TGTCTCCAGA 120  
 GAAAGTTAGA ACTGGTTGAC TTAGCAACCA AGGGNCACTG GGTCAAAGAC GAGGANTCAG 180  
 GACGTCGGTG CCTAGTGACT GAGCGCCANC CAGCCCATTT CTNTACATTG CCATGGGCTA 240  
 AACCCAGTGT GCTGTAAACT CTTGCAGTTC CTTGNGGTTA TGGGATTTTG NTATCTTGNC 300  
 NGTGTTTCCT CAANTAAAGG NNCTGTTTG TAAAAATTGG GNAANAAGAA A 351

SEQ ID NO:1979

SEQUENCE LENGTH:342

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02256

SEQUENCE DESCRIPTION:

GATCTGTTTC CTACAGACTT CAAATTTGAC ACCCCAGTGG ACAAACCTACC ACAGCTATAA 60  
 ATTGAGGCAG CTAACGTCAA ATTCTTGAAT ACAAACCTTT GCCTGTTGTA CATAGCCTAT 120  
 ACAAATGCT GGGTTGAGCC TTTCATGAGG AAAAACAAAA GACATGGTAC GCATTCCAGG 180  
 GCTGAATACT ATTGCTTGGC ATNNNGTATG TATATACTAG TGAACATAT TTAATGATTT 240  
 AAATTTCTTA TCAAATTCT TTTGTAGCAA TCTAGGAAAC TGTATTTTGG AAGATATTTG 300  
 AAATTATGTA ATTCTTGAAT AAAACATTTT TCAAAACTCA AA 342

SEQ ID NO:1980

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02257

SEQUENCE DESCRIPTION:

GATCAGCATG ACCAGCACTC GTTGGNGGAA AGGTGTCTNT NAGGAGACGT CTGGAGCTTA 60  
 TGAGAAAACA GATACTGATG GGAAGTTTCT CTATCACAAA TCCAAATGGA ACATAACCAT 120  
 GCGGTCCTAT GTGGTCCACA CCAACTATGA TGAGTATGCC ATTTTCCTGA CCAAGAAATT 180  
 CAGCCGCCAT CATNGACCCA CCATTACTGC GGTGTCCCTG GTGATGGNGA TGAGGAGCTN 240  
 CTGCGCTTCT CCAACTGACA ACTGGCCGNT CTGCANGTCA GAGGATGGNC AGTGTCTGTC 300  
 CNGGGGTACT GTGGCAGNCA GCGACAAGCA ACCTGNGTCN 340

SEQ ID NO:1981

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02258

SEQUENCE DESCRIPTION:

GATCNTNCG NCTCTGAAGA AGACATGGTG ACTGTGGTGG AGGACTGGAT GANNTTCTAC 60

ATCAACTATT ACAGGCAGCA GGTGACAGGG GAGCCCCAAG AGCGAGACAA GGCTCTGCAG 120  
GAGCTTCGGC AAGAGCTGAA CACTCTGGCC AACCCTTTCC TGGCCAAGTA CAGGGACTTC 180  
CTGAAGTCTC ATGAGCTCCC GAGTCACCCA CCGCCCTCCT CCTAGCTCAG GGACCCAGCC 240  
5 CCTCTCTCT GAGAAACTCT GACCTTCATG TCCTTAGGCT GTGCTCCTGC CACTCTACCC 300  
TGACACCTCA ATAAAGACCA GTGCTGGTTT TGTGGAAA 339

SEQ ID NO:1982

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02259

SEQUENCE DESCRIPTION:

15 GATCCTTNCG TGCTGAATAT CTGAAAAGAG AAATTTTTC TACAAAATCT CTTGGGTCAA 60  
GAAAGTTCTA GAATTTNAAT TGATAAACAT GGTGGGTGG CTNAGGGNAA GAGTATATGA 120  
GGAACCTTTT AAACGACAAC AATACTGCTA GCTTTCAGGA TGATTTTAA AAAATAGATT 180  
CAAAATGTGT ATCCTCTCTC TGAAACGCTT CCTATAACTC GAGTTTATAG GGAAGAAAA 240  
20 AGCTATTGTT TACAATTATA TCACCATTAA GGCAACTGCT ACACCCTGCT TTGTATTCTG 300  
GGCTAAGATN CATTAAAAAC TAGCTGCNCT TAAA 334

SEQ ID NO:1983

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02260

SEQUENCE DESCRIPTION:

30 GATCTTGTC CAAGCTNAGG GTGTAGCGCT GCAAACGATG AAGCAAGAGT TTCTCATTAA 60  
CCTTGGAAG CAAAAGCCAC AAATAACANA GGAACAACCTT GAGGCTGTCA TTGCANATTT 120  
CTCAGGCTNT TGGAGAAATG CTGCCAAGGC AGGACAGGAG TCTGCTTTGT GAGAGGGCAA 180  
AAACTGATTT CAAAACTCG CCTGCTTTGG GNTTTAAATT ACTTCAGGGA AGANAGCAAA 240  
35 CAGNNCTTTC ATTCGGTGTN ACTTTTCTCT NNAATTTTAA CTNNTTTAACT ACTTTTGTG 300  
GATTAATGNA ATGATAAAGC CTTTATCGC NN 332

SEQ ID NO:1984

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02261

SEQUENCE DESCRIPTION:

45 GATCCTGTGT GTGTGTACTA CCATAGAATG GGCCCCAAGA TGCATGATNA AGTGAGGAAA 60  
AAAGCCCATG GTATCCTAAT GTTTGGAATG GAGAAAGTGT GTAGATGTAT GTGTGTGCAT 120  
ATGTTTTAC ACAGACGTAT ACACGTGTAT ATCATATGTC CACCTGCATA TGCCTAGGAT 180  
GTCTCTGGGA GGATATCTAG CAGCCCGGCA GCCTGAATTG CCTCTGGGAA GAGGGGTGGG 240  
AATGACITTT CAATGTACAC CTTTGTIACC TTTTGAATTT TCGTACCATG TACATGTATT 300  
50 ATCTATTAAA AAATAGTTCT TAATTTTAA A 331

SEQ ID NO:1985

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02262

SEQUENCE DESCRIPTION:

GATCACCCGG CAAGTTCAGG CTGAATTCTG AAGGCAAAC T GAGCAGACG GTCTCCATGG 60  
 CAACCCGAGC TTCAGAGGCC GAGGATGCCT CCCTTCTCAG CTTTCATGCAG GGCTACATGA 120  
 AGCAGGCCAC CAAGACCGCC AAGGATGCAC TGAGCAGCGT GCAGGAGTCC CAGGTGGCCC 180  
 AGCAGGCCAG GGGCTGGGTG ACCGATGGCT TCAGTTCCTT GAAAGACTAC TGGAGCACCG 240  
 TTAAGGACAA GTTCTCTGAG TTCTGGGATT TGGACCCTGA GGTCAGACCA ACTTCAGCCG 300  
 TGGCTGCCTG AGGACCTCAA TACCCN 326

SEQ ID NO:1986

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02263

SEQUENCE DESCRIPTION:

GATCCTTACA TCTGCATCTA GTTATCAGTA ATTTAGATAT TGAGCTATTT TGATTTATAT 60  
 TTAAGAAATT AATACATTAG CACTGAAAGT TAAATAGTGT GTTTAAGGTA GTTAATTTCA 120  
 GGTGGAATGG GTTTTTTTTA ATGAAGTGTA AATAATACCA ATGTATAAGN GTATATTATN 180  
 ATATTAAATA TTATAGTAAA AAGGAATGTG TGGTATTNCT TNCAGCAAAA CTATTTTTGT 240  
 GATNTTTTNA TTCTCANTTT TTTATTTAAA AAATGTTACA TCTGCAGAAA AGTTGAAAGT 300  
 ATAATAAACT CTTCACTTAA A 321

SEQ ID NO:1987

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02264

SEQUENCE DESCRIPTION:

GATCTGCGCT GTGGCTGTCC CTGGACGTGC TGCAGCCCTC CTGTCCCTTC CCCCCAGTCA 60  
 GTATTACCCT GTGAAGCCCC TTCCCTCCTT TATTATTAG GAGGGCTGGG GGGGCTCCCT 120  
 GGTTCCTNAGC ATCATCCTTT CCCCTCCCCT CTCTTCCTCC CCTCTGCACT TTGTTTACTT 180  
 GTTTTGACACA GACGTGGGCC TGGGCTTCT CAGCAGCCGC CTTCTAGTTG GGGGCTAGTC 240  
 GCCGAATTCT ACAATCCCGG TGGGCGGGCC GGGGCGGGAG AGAAAGGTGG TGCTGCAGTG 300  
 GTGGCCCTGG GGGGCCATTC N 321

SEQ ID NO:1988

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02266

SEQUENCE DESCRIPTION:

5  
GATCAAAAAT TTCTATCTGG AGAACCTCTG CGGACAAACC GAGTGCTTCC TGCAATTCCA 60  
AGTCAACGAA GACACAGCAC AGCAGCAGAA GAGAGTGAAC ATTCTGCCAA CCCCACCAGT 120  
GATGAAAATT AACTGTGGGC CACTCGCTGC AGAAATGTAG ATGAATATGT ATTTTCAACT 180  
CTCAAAGGAC AAGATTACTC CAGTTTGTA GAACGAAGAC CAATTTAGTA AGCTGCATT 240  
TATAAGCCAT CAGTTTATA ACTCGAAATT CTTTATTCCA AATAAAGATA CTCCTAAAT 300  
AAGCACTTAG ANAAA 315

10  
SEQ ID NO:1989  
SEQUENCE LENGTH:312  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

15  
CLONE:HUMGS02268

SEQUENCE DESCRIPTION:

20  
GATCAAAGCT GGGGCTGGAG GGTGCAGGTG TCAAGCCAGG CCAGGCAAAG GGAGATTGA 60  
AGCCAGAGCA GGTGGGCGCA TCTCCAGGA AACCTGCAT CATTCTTCC TGGTGATTCT 120  
TTCCTTCTTT GTTATGGTTC ACATGAGTCT ATGGAGTGCT CATTCTACAT TCTCCGTTCT 180  
TATCTTCATC CTATGCAACT TTAGACCGCT ACTGTTTTT AAAAGTGATT TGATTGNGG 240  
CTGTAAACCTT TTTTATTGT TGTTAGCTTT GACTTTGAAA TGTGTAATAA AGATTCAAGT 300  
GAGCATTAGA AA 312

SEQ ID NO:1990

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02269

SEQUENCE DESCRIPTION:

GATCTTGGGG TCCCCGACG ACGTGCTCGA GTTCCTGAAG GTGTATGAGA AGCACTCNGC 60  
 CCAAGTGAGCA CCTGCCCTGC CTGCATCTGG AGAATTGCCT CTACCTGGAC CTTTGTCTC 120  
 ACACAGCAGT ACCCTGACCT GCTGTGCACC TTACATTCCT AGAGAGCAGA AATAAAAAGC 180  
 ATGACTATTT CCACCATCAA ATGCTGTAGA ATGCTTGGCA CTCCTAACC AAATGCTGTC 240  
 TCCATAATGC CACTGGTGTT AAGATATATT TTGAGTGGAT GGAGGAGAAA TAAACTTATT 300  
 CCTCCTTAAA 310

SEQ ID NO:1991

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02270

SEQUENCE DESCRIPTION:

GATCCGAGTG AATGCAGTAA ACCCCACAGT GGTGATGACG TCCATGGGCC AGGCCACCTG 60  
 GAGTGACCCC CACAAGGCCA AGACTATGCT GAACCGAATC CCACTTGGCA AGTTTGCTGA 120  
 GGTAGAGCAC GTGGTGAACG CCATCCTCTT TCTGCTGAGT GACCGAAGTG GCATGACCAC 180  
 GGGTTCCACT TTGCCGNTGG AAGGGGGCTT CTGGGCCCTGC TGAGCTCCCT CCACACACCT 240  
 NAAGCCCCAT GGGCGTGCTC ATCCTACCCC CAATCCNTCC AATAAACCTG ATTCTGCTGG 300  
 CCAAA 305

SEQ ID NO:1992

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02271

SEQUENCE DESCRIPTION:

GATCGAGACA CGTGATGGGA AGCTGGTGTG TGAGTCCTCT GACGTCCTGC CCAAGTGAAC 60  
 AGCTGCGGCA GCCCTCCCAG CCTACCCCTC CTGCGCTGCC CCAGNNCTG GGAAGGAGGC 120  
 CGCTATGCAG GGTAGCACTG GGAACAGGAG ACCCACCTGA GGCTCAGCCC TAGCCCTCAG 180  
 CCCACCTGGG GAGTTTACTA CCTGGGGACC CCCCTTGCCC ATGCNTCCAG CTACAAAACA 240  
 ATTCAATTGC TTTTTTTTTT TGGTCCAAAN TAAAACNTCA GTTAGCTNTG CCAATTTNAA 300  
 A 301

SEQ ID NO:1993

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02272

## SEQUENCE DESCRIPTION:

GATCTGAACT CCAGCTGCCC TACAACTCC GTCACAGCTT TTNTTCTCAC TTCATGTGAA 60  
 AACTACCCCA GTGGCTGACT GAATTGCTGA CCCTTCAAGC TCTGTCCCTTA TCCATTACCT 120  
 TAAAGCAGTC ATTCCTTAGT AAAGTTTCCA ACAAATAGAA ATTAATGAAT AAATGTTGAC 180  
 ACTTTGATAG CACTGATATG GAGATTATCC TTTCATTGAG CCTTTTATCC TCTGGTCTTC 240  
 TTTGAAGAAC CCCTCACTGT CACCTTCCTG AGAATACTCT AAGACCAATA AATACTTCAG 300  
 TATTTAGAA A 311

SEQ ID NO:1994

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02274

## SEQUENCE DESCRIPTION:

GATCTAAAC TNAAGAACAA ATTCTATTTA TTTATTATTG GAAAATNAAA AGCAACTCAA 60  
 ACAAACITCA ACCTGGAGGT GCATTATATA TTCATTCTGC ATTTATTCTG TAAAAAGGTG 120  
 ACTGTTTTAT AAATNCTTTT AATTTATGTT CAATATATAT AAAAAAGTGCA TCTNTTTTNT 180  
 TTTTCCCTTT TTTCTCCATA ATTTAAGAA ATGAATNNGN TTGTTGTCAA CACATTGTG 240  
 AAGTCTTGTC CTATAAAGGG GAACCTCCCC TAATAAAGG GCCTTGAAA CCTCAA 297

SEQ ID NO:1995

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02275

## SEQUENCE DESCRIPTION:

GATCTAGGAG AGGCGGCTCT GAACGATTAC CTGCGGGTCA AGACAGTNAC CTTCAATAC 60  
 TGAAGAAAGG TCTTTTAAAG AAGAAAGTCC CTGCCCTCC CTCGTGGCTG GGGCCCCCTC 120  
 CCTNTTAAAG CTGGNTGCAC AGCACCTCCC ACCTGGGGGG CTAGTGGAAG CCCTCCTGCN 180  
 TGCACACCAT GTTTCNTCT TGGACGCCCT CTTCCAGTN ANAAGCAGCC CTTGGNTGGN 240  
 TNAGGTGTGC CCCTCCCAGG NAGAATAAAG CTTCTAAAGA NAGACCGTCC AAA 293

SEQ ID NO:1996

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02276

## SEQUENCE DESCRIPTION:

GATCAGGAGG AAGTGAGCAG TCGCCTGCCT GCAGCAGGNA GCTTCTACT CCTGCCTCAT 60  
 GCGTACGTCC CACAAATGCA GGTGTCCTGA GCACCACACC CAGTGGGAAG AGTGTGGGGG 120  
 AGGCGCACAG TGTGAGCCCG CCCCCACGTC GTGGGTTAAC ATCTGTTATC AAAGTGTGT 180  
 CGTTGTTGTG GGTGTTGCTC TTGAACAAGA TGTGGGCCTT GCAAGATGGG AGAGTAAACC 240  
 TTGAAGGGCT TTATTAAGA AATAAAAAAG NACTTNTTGT ATCTTTTAAA 290

SEQ ID NO:1997



SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02277

SEQUENCE DESCRIPTION:

GATCCTGAAG AGGATGGTGT GGGAAATGCAC TTGAGAAAT GNCTATCTAA CCTTTNGAAA 60  
 CTAAAGTGT TCCCAGTCCC CATTATACCT TTTAAACCA CAATAGTCAC ATAAGGAAAT 120  
 AATCTAGCAG CTCATCCCTT TGCATCCAAT GTTTGAACTA TTTTAGAAA GTGCTCTNGT 180  
 TCTGTCAAAG AACCTTCAAC ACAGAAAAAT ACANAAATGA GGGAAATGTA TAATTCCTGC 240  
 AGGAGAGAAG TGTGTGTAAC ATGTCAATAN ATGTTCTTAG ANAGTTAAA 289

SEQ ID NO:1998

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02278

SEQUENCE DESCRIPTION:

GATCAGAGAA GCTAGGAGAG CTCCAGCAGG GGCACAGAGG ATTGGNNGCA GGAGGAGTCT 60  
 GGAACACAGC CTTCATGCCC CCTGACCCCA GGCCGACCCT CCCCACACCC TAGGGTACCC 120  
 CAGTCGTATC CTCTGTCCGC ATGTGTGGCC AGGTCTGACA AACACCTGTA GATGACTGNT 180  
 GGCCNAACCT GGGNCCTGNN CAGGAGGTTG GAGCAGNAAG GGCTCTCCCT AGGGGTGGTG 240  
 TNTCTCCTCT AGGGTATTGG GNTGCATGNN NTGCACTNN 279

SEQ ID NO:1999

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02279

SEQUENCE DESCRIPTION:

GATCATGAAG GAACACATAG CACCAAGAGA GGCCATGCTA AATCTCGCCC TGTCAGAGGT 60  
 ATCCACACTT CTCCTTTGGG GAAGNCTTCC CTGTCCCCCT TGCATTTCCT TCTTAACTCT 120  
 CTGTTACACG TCATTGAAAC TACACTTTTT TGGTCTNTTT TTNTGCTAGA CTGTAAGTTC 180  
 CTTGGGGNCA GGGCCTTTGN CTGNCTCATC TCTGTATTCC CAAATGCCTA ACAGTACAGA 240  
 GCCATGACTC AATAAATACA TGNTAAATGG NAAA 274

SEQ ID NO:2000

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02280

SEQUENCE DESCRIPTION:

GATCTTAACA AAATTCGTAG CAGTGAACCC TTGAAATGCA TGTGGCTAGA TTTATGCTAA 60  
 AATGATTCTC AGTTAGCATT TTAGTAACAC TTCAAAGGTT TTTTITGTT TGTITCTAG 120  
 ACTTAATAAA AGCTTAGGAT TAATTAGAAG AAGCAATCTA GTTAAATTC CCATTGTAT 180  
 TTNATTNCT TGAATACTTT TTNCATAGTT ATTTGTTTAA AANGATTAA AAATCATTGC 240

ACTTTGGTCA GAAAAATAAT AAATATATCT NATAAACAAA

280

SEQ ID NO:2001

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02281

SEQUENCE DESCRIPTION:

GATCTGCATG TTCTCTCTTT GGGTTCAAGC ATTCCTTAC AGAAGAGCCA CCGTGGAAAGT 60  
 CATGGGTAAA TATGTGTTGA ATTGGTAACT CCCTCTTGA GAATTTCTTG TGAATTACAC 120  
 AGCAATAGGG GAACTCATT AACTGGAGAC ATAATCTCAA TTTGTAAAGT GTGGCCCAT 180  
 TTCTAACATT TTNANNTTGC ATACCCTCCC CTCTCTTCTC GATTGATGAA ACTAACAAAG 240  
 AGGTTAATAA AAGCCCATCT CGTCATGTAA A 271

SEQ ID NO:2002

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02282

SEQUENCE DESCRIPTION:

GATCTTACCC GTGACAAAAT GTGTTCCATG GTCAAAAAAT GGCAGACAAT GATTGAAGCT 60  
 CACGTTGATG TCAAGACTAC CGATGGTTAC TTGCTTCGTC TGTCTGTGT TGGTTTACT 120  
 AAAAAACGCA NCAATCAGAT ACGGAAGACC TCTTATGCTC AGCACCCNCA AGGTNCGNCN 180  
 AATNCGGGAG AAGATGATGG GNAATCATG GCCCGTGAG GGTTCAGGC AAANTTTGCT 240  
 TTTGAANGNA AGGGGGGNNA ATAAATTNGN 270

SEQ ID NO:2003

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02283

SEQUENCE DESCRIPTION:

GATCCCAACA GAAGAACATC GGAGACCAGA GAGAGGAACT CAAAGGGGCG CTGCCTCCGG 60  
 GTCTGGGGTC CTGGCCTGCG TGGCCTNTTG GCACGTGTTT CTCTTCCCCG CCCGGCCTCC 120  
 AGTTGTGTGC TCTCACACAG GCTTCCTTCT CGACCGGCAG GGGCTGGCTG GCTTGCAGGC 180  
 CACGAGNGTN GGCTCTACCC NACACTGGCT TTGCTGTGTA TACGCTTNTT GCCCTTAAAT 240  
 AAATATGCAC ATTTTATCCA TTAAT 265

SEQ ID NO:2004

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02285

SEQUENCE DESCRIPTION:

GATCCACATT GTTAGGTGCT GACCTAGACA GAGATGAACT GAGGTCCTTG TTTTGTTTTG 60

TTCATAATAC AAAGGTGCTA ATTAATAGTA TTTCAGATAC TTGAAGAATG TTGATGGTGC 120  
 TAGAAGAATT TGAGAAGAAA TACTCCTGTA TTGAGTTGTA TCGTGTGGTG TATTTTTTAA 180  
 AAAATTTGAT TTAGCATTCA TATTTTCCAT CTTATTCCCA ATTAAGAAAGTA TGCAGATTAT 240  
 TTGCCCAAA 249

SEQ ID NO:2005

SEQUENCE LENGTH:242

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02287

SEQUENCE DESCRIPTION:

GATCAGGAGC AAACAGACCC TGCAAGGTCC TCCAGGCCTG GGGACAGGAA AGCCACTGAC 60  
 CCAGCCCGGG AGGCAGAACC AGGCAGCCTC CNTGGCCCCA GGCAGCCCTT TTCCCTCCAG 120  
 TGGCACCTCC TGGAAACAGT CCACTTGGGC GCAAAACCCA GTGCCCTCCA AATGAGCTGC 180  
 AGTCCCCAGG CCATGAGCCT CCCGGGAATG TTTAATAAAG GGCCTGGCCA CCTCTCCTCA 240  
 AA 242

SEQ ID NO:2006

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02288

SEQUENCE DESCRIPTION:

GATCTAAGTT TGATAAGAGC CTGTGTGGTG AGTATGGTGT GTATGTGAAG GTGACTTCCA 60  
 TCCAGGACTG GGTTCAGAAG CCATAGCTGA GACTAATGCA AGGCTGGCGA AGCCTTGCTG 120  
 AAAGAAGATT TCAGCTGGAG AGGCAAAGTG GCGGGAGTGG CAGAGTGGTG CGTAAGTGTG 180  
 GTTAAGTNTG GGTCCANCCT GCATTCTGAG CAATCAATAA AGTNTTCTT TTNCCCCAA 239

SEQ ID NO:2007

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02289

SEQUENCE DESCRIPTION:

GATCCTGAAG GTAATACAAT CAGCAACATT AAAACATTTT TTTCATTTTC TGTTACTGAA 60  
 GTAAAATAAG CATTCCACAT TTATAAACA CAGGTTATTT CAGGAAGATA TTTTCATATC 120  
 TTACAGCGAA AAGTCTTTTC AAACAGAAGC ACCTAATATT TAATATATTA TTTTGTAAT 180  
 TATTGACTAA CAAAATGATG ACTCGACTGG CGAAATAAAA TACAGTTTTT AAATCAAA 238

SEQ ID NO:2008

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02290

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCCTGAGA NCTTCAAGCT CCTGGNNAAT GTNCTGGTGA CCGTTTTGGC AATCCATTTC 60  
GGCAAAGAAT TCACCCCTGA GGTGCAGGCT TCCTGGCAGA AGATGGTGAC TGGAGTGGCC 120  
AGTNCCCTGT CCTCCAGATA CCACTGAGCT CACTGCCCAT NATGCAGAGC TTTCAAGGAT 180  
AGGCTTTATT CTGCAAGCAA TCAAATAATA AATNTATTCT GCTANGNNA AACAAA 236

SEQ ID NO:2009

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02291

SEQUENCE DESCRIPTION:

GATCATTACC ATTACAGGAA CACAGGACCA GATACAGAAT GCACAGTATT TGCTGCAGAA 60  
CAGTGTGAAG CAGTATGCAG ATGTTGAAGG ATTCTAATGC AAGATATTTT TCCTTTTTTA 120  
TAGTGTGAAG CAGTATTCTG GAAAGTTTTT CTAAGACTAG TGAAGAACTG AAGGAGTCCT 180  
GCATCTTTTN NNGTTTAANC TGCTTCTGTT NAAAANGCCA NCATTCCTCT GTTTN 235

SEQ ID NO:2010

SEQUENCE LENGTH:233

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02292

SEQUENCE DESCRIPTION:

GATCCTGAAG AACTTCAAGC TCCTGGGAAA TATGCTGGTG ACCGTTTTGG CAANNNGTTT 60  
CGGCAAAGAN TTCACCCCTG AGGTGCAGGC TTCCTGGCAG AAGATGGTGA CTGGAGTGGC 120  
CAGTGGCCCTG TCCTCCANAT ACCACTGAGC TCACTGCCCA TAATGCAGAG CTTTCAAGGA 180  
TAGGCTTTAT NCTGCAAGCA ATACAAATAA TAANTCTNTC CTCCTAAGAG AAA 233

SEQ ID NO:2011

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02293

SEQUENCE DESCRIPTION:

GATCCTTGAC GAGGAGAGAG AGCTTGAAAA GCTGTTTCAG CTGGGCCCCG CTTACCTGT 60  
GAAGATGCCC TCTCCACCAT GGAATCCAA TCTGTTGCAG TCTCCTTCAA GCATTCTGTC 120  
GACCCCTGGAT GTTGAATTGC CACCTGTTTG CTGTGACATA GATATTTAAA TTTCTTAGTG 180  
CTTCAGAGTT TGTGTGTATT TGTATTAATA AAGCATTCTT TAACAGAAA 229

SEQ ID NO:2012

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02294

SEQUENCE DESCRIPTION:

GATCTGGCAT AAATAAATTN AATAAATATT TTAATGCTCC ATTTTITAAT GTTGCTTTTC 60

ATACTAAAGA ATGGTGTAGA CTTGTTTTGC AACTNTAAGG TACCCAGTTA TCAATTTAAT 120  
 CAATGTTTTA GAGNAGGAAA TNATTTTTTN GGTAGAAATT GTTCANGAAC CTTAATTGAA 180  
 TGCATTAAAT GATGGTGGCA AAATAAACCT ATTAGAAATT AAA 223

5

SEQ ID NO:2013  
 SEQUENCE LENGTH:221  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10

CLONE:HUMGS02295

SEQUENCE DESCRIPTION:

15

GATCAATGCC CTCATCTGCA ATGTAGGGGC CGGTGGACCT GCTCCAGCAG CTGGTGCTGC 60  
 ACCANAGGAG GTCCTGCCCC CTCCTACTNCT GCTGCTCCAG CTGAGGAGAA GAAAGTGGAA 120  
 GCAAAGAAAG AAGAATCCGA GGAGTCTGAT GATGACATGG GCTTTGGTCT TTTTGACTAA 180  
 ACCTCTTTTA TAACATGTTT AATAAAAAAGC TGAACTTTAA A 221

SEQ ID NO:2014

20

SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02296

SEQUENCE DESCRIPTION:

25

GATCTGTAGT GTCATGGGTG CTGCCGAGCA CGNAAGTTGA NCTGGGGGTG CCTGCAGCCT 60  
 TCCACTCCTG CCCCGCCTCA CCCACATGC TCCCTGTTTC TAATGCTTTC TCTAACTTCC 120  
 TCACCCCTTA ACCAAAAAGG TGTGTTTNCCT TTTGTNCATA TAGCCATTCT NAAATATNAG 180  
 TAATGTAAAC CTNACTTTAT TAAAAAATTA TCCAGCAAA 219

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SEQ ID NO:2015  
 SEQUENCE LENGTH:216  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02297

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SEQUENCE DESCRIPTION:

40

GATCAGGTTT GTTGAGTTTT TTAGCCTAAT TCCAAAGCAT GGAAGAGTGC TCTAGGTAGG 60  
 AAAGAAAGCT TTTTCTTACG ATTTGTAGCT ACCTACTGTG CCTGACTTGG TGCCTGTGTG 120  
 AGGATTAAGC CCTTAGTCTG CTCTTGCAAT TATTCAAATG ACAAATTAAA TTTGCTTTTG 180  
 TAATAACAAT AAAAGTTGTC ATCTTCCCTT TTGAAA 216

SEQ ID NO:2016

45

SEQUENCE LENGTH:210  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02298

SEQUENCE DESCRIPTION:

50

GATCCTGCCA TCACTGCTGC AAAGAGAACA CGAGACTCAA GGAAACTCCT CCTCCACCGC 60  
 AGCCCAACTG TGCCTGCTAG TATCCCGGTG CACACAGGCA GCTCCAGGGG GCTCTGGTTG 120

55

CCAACAAACA GCATTGTAA ATGGTCTATT AGCCTTCATT TATACTGCCT AACAATTATT 180  
TGAAGGAATA AATTGATGTC AATGGCTAAA 210

SEQ ID NO:2017

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02299

SEQUENCE DESCRIPTION:

GATCTAGCCT GATTCTGCG TGTCCGAAAG AACTTAACGT TTAAAGGTN ATTGTNAAGT 60  
AACTGTGTGG GGTTCATG CCAGTTTCCT AATTCCATCT CACTGGAGAT GTTAAAGTT 120  
GGCCTCTATC CTAATGACTC AAACTTGGT TCTTAACTAC CATGATTGCT TTNAGGGCC 180  
CGGAATTATA AATATATATN ATATTAAANT TGTTTGAAA 219

SEQ ID NO:2018

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02300

SEQUENCE DESCRIPTION:

GATCCGGGGC ACAAGAGGG TGGGGAACAT GGGGGCTATA CTGGGAAAG CAGCCATGCT 60  
CCCCCNACC TCCAGCCGAG CATCCTTCAT NAGCCTGCAG AACTGCTTTC CTATGTTTAC 120  
CCAGGGGACC TCCTTTCANA TGAAGTGGGA AGAGATGAAA TGTTTTTCCA TATTTAAATA 180  
AATAAGAAC TTAAGGCA ACCCCAAA 208

SEQ ID NO:2019

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02301

SEQUENCE DESCRIPTION:

GATCTCAAGG CTGCCGTACT GGAGGCCATG ACTGCCTTCC GCAGAGCAGG TGCTGACATC 60  
ATCATCACCN ACTACACACC GCAGCTGCTG CAGTGGCTGA AGGAGGAATG ATGGAGACAG 120  
TGCCAGGCCC AAGAACTAGA ACTTTAAAC GTTCCCGGG CCTCAGACAA GTGAAAACCA 180  
AAGTAAATGC TGCTTTTAGA AA 202

SEQ ID NO:2020

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02302

SEQUENCE DESCRIPTION:

GATCTTCTTT GAGACAAGGC AGGCTGTGGC CATGTAGCCC CATCACAATG TGTTTGTNAT 60  
TGTCTGTGTG TCTGTCTCCC CCACCAGACT GTGAGCTCCA TGAGGGCAGG GACCGTGTCT 120  
TGTCCGTTCT CTGTATCCCC AGTGCTTGA ACAGAGCGAG TGCTCACTGT GTATTTAATA 180

AATGGACAAA GAGAGAGGAT GACCCCTCACG GGGAGACAGA GAAA

224

SEQ ID NO:2021

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02303

SEQUENCE DESCRIPTION:

GATCGGCAAA TGCATTGGCC TCCTGGTTAA GCACGTTTTG GGGATAATTT TCTCTTCTTT 60  
 AGGCAATGAT TAAGTTAGGC AATTTCCAGT ATGTTAAGTA ACACACTTAT TTTTGCCTGT 120  
 GTATGGAGAG ATTCAAGAAA TAATTTTAAA ACCGCATACA TAATAAAGA CATTGTTGCA 180  
 TGGCTTATAG TCAAA 195

SEQ ID NO:2022

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02304

SEQUENCE DESCRIPTION:

GATCTGTGCC GTGGTCCTGA GGCAGTTGTC TCCACACAAG TACCTCTAGA ACAATCCCCT 60  
 TTTTCCATC AAGCTGTAGC CTGCAGAGAA TGGAAACGTG GGAAAGGAAT GGTATGTGGG 120  
 GGAAATGCAT CCCCTCAGAG GACTGAGGCA TAGTCTCTCA TCTGCTATTG AATAAAGACC 180  
 TTCTATCTTG AAA 193

SEQ ID NO:2023

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02305

SEQUENCE DESCRIPTION:

GATCTNCCCT GCATCCTGAC CAAGACCCCA ACCGTGCCCC CAACAGACTC CCCCTGGGAG 60  
 ATTCAGCCTA TTCACTGATG AGGAAAGTGA AGCCGGGTCT CCTGTCTCCC CAAATTCATT 120  
 GCACCTACGA TATAGTCCAG GATTGGGTAG CAAGATTAAA CACAAGCGCT TCAAATTGAT 180  
 GAAAACCACA AA 192

SEQ ID NO:2024

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02306

SEQUENCE DESCRIPTION:

GATCCCTAAC TACCAACCCC CTGAAGGCAG GTACAATGAC ATCACCAAGG TGTACACACA 60  
 AGTGGAGTTT AAGAGATAGA CTTCAGGCT GCTATCCTTA ACATGCTGCC CCTGAGAGTA 120  
 GGAATGACCA GGGTTCAAGT CTGCTTTCCA CAGAATCAGG CATNCTGTTA ATAAATACTG 180  
 GTTTAATCAA A 191

SEQ ID NO:2025

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02307

SEQUENCE DESCRIPTION:

GATCGTATTT CAGTTTTTG GGTCAATATA TGAACAATGT GTGAACCAGA ACGTATGGTA 60  
TTTGACATCA AAGCTATGTC TTGGCATATG TTTATGTTGA TATACTTGAA TTCATTAAA 120  
ATGGAATGTT AATTACATCG ACTTCTTACT ATAAAAATA AAAAGTTATT GTCCAGTGCA 180  
CAGAAA 186

SEQ ID NO:2026

SEQUENCE LENGTH:380

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02308

SEQUENCE DESCRIPTION:

GATCCATTGA GAAAGAGATG ATGTAATAAA TAATTAAGAT TAGTAATAAT ATTATCAGGG 60  
GTGATTATGA CCAGTTGAAT AATCTCTTTC CTTGAATTA TTTAGCTAAC AAATTAAGTC 120  
TCCCAAATAT NTAAANTAAT GTAAANTCAT ATTTNACTGC CCATTATTAA CTAAAAATTT 180  
TNTGNTGAC TTTGAGCACC AACTGGTAAT ACTAGTAAAT ACCCATGTCA TGCAGATGGC 240  
TGGGCGAATA AGAGATGTCT AAAAATATGC ACTGGTCTTG GGAAACATGG CACAAGTAAG 300  
GNTATCATAT ATGANGTCTG GTTTATTTTA TGTCTGATTT CTTTTGANT GAGTAGTTNG 360  
GGACTCCANT TCTAAGGNTN 380

SEQ ID NO:2027

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02309

SEQUENCE DESCRIPTION:

GATCTCTCCA CAGGGCTTGT TTTCCAAAGA AAAGTATTGT TTGGAGGAGC AAAGTTAAAA 60  
GCCTACCTAA GCATATCGTA AAGCTGTTCA AAAATAACTC AGACCCAGTC TTGTGGATGG 120  
AAATGTAGTG CTCGAGTCAC ATTCTGCTTA AAGTTGTAAC AAATACAGAT GAGTTAAAAG 180  
AAA 183

SEQ ID NO:2028

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02310

SEQUENCE DESCRIPTION:

GATCTGCAGC TGCCTTGGGA CTTGAATCCA TGCAATGTTT AGAGTGTGAA GTCAGTTACT 60  
TGTTGATGTT TTCTTACTGT ATCAATGAAA TACATATTGT NATGTCAAGN CTTGCCAGGA 120



ACTTCTCAAC AAAATGGAAT TTNNTTTTNC AGTATTTCAA TAAATATTGA TATGCCCAGC 180  
CTGNTAAA 188

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SEQ ID NO:2029  
SEQUENCE LENGTH:178  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02311

SEQUENCE DESCRIPTION:

GATCCATGCT GATTTTATT GCACAAGAAT TAGGTTTGAA CTCTTGAGCT GGAACCTCAG 60  
CAAAC TAGAG TATATATTGT TCAGTATNNC TTTGGAAACA TTTCATTAAT GTACTTGTCT 120  
TACANAAATT TCTGAACTTT AGTAAAAAAA AAATAAAGTT AAACTTTAA AACTCAAA 178

15

SEQ ID NO:2030  
SEQUENCE LENGTH:176  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20

CLONE:HUMGS02312

SEQUENCE DESCRIPTION:

GATCGGTATG TTTTGAAAAG AGTAATTTAA CTTTGGGGTG CCAGGAAATG GGTTTTCTCA 60  
AAGTCCATTG CCGGCAATGG GCAGGCCTGC AAATACTGGC ACAGAGCATT AATCATACAC 120  
CTTATTAACG GTGAGGTGAA TAACTTTGAA ATAAAGTTT AGAGAAATGT TTCAAA 176

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SEQ ID NO:2031  
SEQUENCE LENGTH:174  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02313

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SEQUENCE DESCRIPTION:

GATCCGCCTG GCAGCCATTG CAGAGTCAGG GGTAGAGCGG CAAGTACTTT TGGGAGACCA 60  
GATACCCAAA TTCGCCGTTG CCACCTTACC ACCCGCCTGA ATCCTGGGAT TCTAGTATGC 120  
AATAAGAGAT GCCCTGTACT GATGCAAAAT TTAATAAAGT TTGTCACAGA GAAA 174

35

SEQ ID NO:2032  
SEQUENCE LENGTH:172  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02314

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SEQUENCE DESCRIPTION:

GATCCAGAAG TTATGGTGGC TTTCCAGGAT GTGGCTCAGA ACCCAGCAAA TATGTCAAAA 60  
TACCAGAGCA ACCCAAAGGT TATGAATCTC ATCAGTAAAT TNCAGCCAA ATTTGGAGGT 120  
CAAGCGTAAT GTCCTTCTGA TAAATAAAGC CCTTNC TGAA GGAAAAGCAA CN 172

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SEQ ID NO:2033  
SEQUENCE LENGTH:170

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02315

SEQUENCE DESCRIPTION:

GATCTCAGGA CCTCTTTACA CTTTCAAAG TTAAGTAAAG CTCTGAAGAG CTTTCTTTA 60  
TGAGGTATATA TCAATATTTA CTACATTAAG AATTAAGACA GAAAATTTAA AGTAGGTATT 120  
TATTGATTTA TTAAACAAT AAAAATAATA AAGTATTACA TGCTAACAAA 170

SEQ ID NO:2034

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02316

SEQUENCE DESCRIPTION:

GATCCGTTTG CTGTGAACCC TATGTTATTT CCATGTGTCA AGTGGGTCTT GTGTTGCCAG 60  
CTTCTATTTG AAGATTGCGT TTGCACTCAG TGTAAGTTTC TGTCAGCAGT AGTTTCACCC 120  
ATTTGCATGG AAAAATTTAA AGCTAATAAA GCAATTTAAA AAGCACAAA 169

SEQ ID NO:2035

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02317

SEQUENCE DESCRIPTION:

GATCCACAG TCTCAGCCCT GCTTACTAGT GAGAAAGACT GGCAAGGTTT CCTAGAGCTC 60  
TACTTACAGA ACAGCCCTGA GNCCTGTAAC TATGGGCTCT GAAGGGGGCA GGAGTCAGCA 120  
ATAAAGCTAT GTCTGATATT TTCCTTCACT AATATGAAA 159

SEQ ID NO:2036

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02318

SEQUENCE DESCRIPTION:

GATCCGGGGN AGCTAGGATG GGGAACTGC CACAGCCAGA ACTGAGGGGC TGGCCCCAGG 60  
CAGCTCCAG GGGGTAGAAC GGCCTGTGC TTAAGACACT CCGCTGCCC CGTCTTGAGG 120  
GTGGCGATTA AAGTTGCTTC ACATCCTCAA A 151

SEQ ID NO:2037

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02319

SEQUENCE DESCRIPTION:

GATCTAACAT CAAACTAACA GCTTTCAGAA AGGAGACTNT TGNCATCTTT TCACCAAGGA 60

GTATATTTGT AGAGTAATAT ATGTGTGGAA NTTNAAATT ATATCATTG ACATGATTTA 120  
TGAGGCTTAT TTAAGCTGGA GTNNNCCN 148

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SEQ ID NO:2038

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02321

SEQUENCE DESCRIPTION:

GATCTGGTCT AGTTAACCTA GAAGTATTTT TGTCTCTTAG AAATACTTGT GATTTTATA 60

ATACAAAAGG GTCTTGACTC TAAATGCAGT TTTAAGAATT GTTTTGAAT TTAATAAAAG 120

15

TTACTTGAAT TTCAAACATC AAA 143

SEQ ID NO:2039

SEQUENCE LENGTH:142

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS02322

SEQUENCE DESCRIPTION:

GATCTGGAGG AGGTGAAGGC CAAGGGACCT GCTTCTATTA GCCCTTCTCC ATGGCCCTGC 60

25

CATGCTCTCC AAACCACTTT TTGCAGCTTT CTCTAGTTCA AGTTCACCAG ACTCTATAAA 120

TAAACCTGA CAGACCATGA AA 142

SEQ ID NO:2040

SEQUENCE LENGTH:156

30

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02323

SEQUENCE DESCRIPTION:

35

GATCGAAAGA AGAACATCAT GAAAAAANAAA TNAACTTTGC TTAGTGGATT AGACTCCTTT 60

GCTGAAGTCA GTTATTCATC AAGAATGCAA TTAGACTAAT TGTGAATAAA TGATTGAATG 120

AAGATATAAT AAATAAAAGC TATAATTATA GATAAA 156

SEQ ID NO:2041

40

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02324

SEQUENCE DESCRIPTION:

45

GATCTCTCCT TCAGTCTGCT CTGTTTAATT CTGCTGTCTG CTCTTCTCTA ATGCTGCGTC 60

CCTAATTGTA CACAGTTTAG TGATATCTAG GAGTATAAAG TTGTCGCCCA TCAATAAAAA 120

TCACAAAGTT GGTTTAAA 138

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SEQ ID NO:2042

SEQUENCE LENGTH:137

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02325

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SEQUENCE DESCRIPTION:

GATCCACAGG CAGAGCCAAG GGAAGGTGTG ATTCTNTGAG GAAAGAGTGA TTCTGATATA 60

TGTACTTGTG ACATTGGTGT TGGACACATT TGCGCCAAAA GTATGGTAAT NCTATTATNA 120

AATAATTCTC TGAGAAA 137

10

SEQ ID NO:2043

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS02326

SEQUENCE DESCRIPTION:

GATCCAAACT GGAANCAGCT CAAATNTCCA TCAATAGCAG AAAGATAAAC AAATGTNGGG 60

ATGTNCAGAG CTTGAAATAT GACACANTAT AAAAGGACAA ACTATTAAAA CTCACAACAG 120

CATGGATAAN TCTN 134

20

SEQ ID NO:2044

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS02327

SEQUENCE DESCRIPTION:

GATCCAAGCA GGCCTTGAAT GCAATNGCAA GTGTTTATA GTCCCTTGCT CTTACAACTT 60

GCAGGACAT GTGTTATTT AGAAATTGTG ACTGAGCGGA CCCAAGAATN TAAATAATAT 120

TCATAAACCT AAA 133

30

SEQ ID NO:2045

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS02328

SEQUENCE DESCRIPTION:

GATCACCTGT AGGGAAATGA AGTGTNCCCT GGAACAAGGA GGTGGGGGCA NTGTGGCCCC 60

TTCCCCAACT GGGGTGGAC AGCTGTNTCC TGGGTGGGT TGTATTAAA GAGGAAAGCN 120

ATTTTTGGA AA 132

40

SEQ ID NO:2046

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02329

SEQUENCE DESCRIPTION:

GATCCCAGGA ACTGTGGGCA CCCATTTTCT GTGTCTCCA GCCCATTTCC ACTCCTAGTT 60

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55

TGTCATGGAT AATNTTTGTT GTTCCTGTG TGATTTTGC CATCAAAATA AAAATTTGAG 120  
 ACTCGTTAAA 130

5 SEQ ID NO:2047  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02330

10 SEQUENCE DESCRIPTION:  
 GATCCAAGGT CAAAAAACA AATNCATCAA TTCAGCACAC CACCAACTNA NAGGCTAAGC 60  
 ATCTTACTGC TAATTCATTG ANGCTGCCAT TTGTCAAGTG CCAAATTGAN TTATTGATTT 120  
 GTCAATANTN 130

15 SEQ ID NO:2048  
 SEQUENCE LENGTH:130  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02331

20 SEQUENCE DESCRIPTION:  
 GATCAGATAT ACAAATAA AGTTTTTAT TTCATTAAAT ATTTAATTAA AACTGCTAAG 60  
 TTTGAAAATT TTTACCAAGA AATANTTTT ANAAATTTN CTAAGTTGAT AAAGGCTTTT 120  
 AAGCAATAAA 130

25 SEQ ID NO:2049  
 SEQUENCE LENGTH:129  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02332

30 SEQUENCE DESCRIPTION:  
 GATCTATATT CCCTTATTGC ATTTTCCTTA TGTATAAFTT TCCAGATGGT GATGTTACTT 60  
 TTCAGTGAC TCATATGTCT CATTTTCATC TAAATTTAA TGGCAGGAAA CAAGGACTGC 120  
 ATAGAGAAA 129

35 SEQ ID NO:2050  
 SEQUENCE LENGTH:129  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02333

40 SEQUENCE DESCRIPTION:  
 GATCAAAAGC TTATTCNTT TTTTTTTTTT TTCCTTGGTG TAAAGCCAAC ACCCTGTTTA 60  
 AAANANATAA TTTTTTTTAA TCATTTTCN TCCTTTTTTT TTGCTTCATT NAATAAAAAAN 120  
 TGGAAAGAN 129

45 SEQ ID NO:2051  
 SEQUENCE LENGTH:148

50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02334

SEQUENCE DESCRIPTION:

GATCTGAACA CCACAGCCCC TGTACTTGGG TTGCCTCTTG TCCCTGAACT TCGTTGTACC 60  
AGTGCATGGA GAGAAAATTT TGTCTCTTG TCTTAGAGTT GTGTGTAAAT CAAGGAAGCC 120  
ATCATTAAAT TGTTTTATTT CTCTCAA 148

SEQ ID NO:2052

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02336

SEQUENCE DESCRIPTION:

GATCCANCTN TNTCAACCTC CCAAGTAGGA TTACAAGCAT ACGCCGACGA TGCCCAAGAT 60  
CCAGAACTTT GTCTATNACT CTCCCAACA ACCTAGATGT GAAAACAGAA TAACTTCAC 120  
CCAGAAAACA AA 132

SEQ ID NO:2053

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02337

SEQUENCE DESCRIPTION:

GATCCATCCT TCCTGCCTCC AAGGAGGATA CACAGAGAAT GGCTTCTGT TGTTTTGT 60  
ATTTTCTTAA CGGTACAGA TGGAACTTC ATTTAAAAAT AAAACAAAA CAACTCAAAA 120  
AGGAAA 126

SEQ ID NO:2054

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02338

SEQUENCE DESCRIPTION:

GATCAAAAAA GCTCACGTCG TATTCTTCT TTTCCTTCT CTTTCTAGA AATTGGGTGT 60  
TTGTACCAGA ATGGAATTTT GCTTCTCGGT TATCCTGTGC TTCAGATGAT TATAATCTAA 120  
CCCAA 126

SEQ ID NO:2055

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02339

SEQUENCE DESCRIPTION:

GATCAATCT TACAGTCAT CACAGATCC ATGTTGGTGA TAAATNCTAT AAAAGTAATA 60

EP 0 679 716 A1

GGGGTGGTAA GAACATCAGA GANTCCACAC AGGAAAAAAAA ATCTATAAAA NGATTCTTTG 120  
TGAAA 125

SEQ ID NO:2056

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02340

SEQUENCE DESCRIPTION:

GATCCACAG AAATGTTTGG GAGAGCGGGA GGTTCCTCC AATCTCTCC AAGTTCTTCT 60  
CCCTCCAACC AGAGTTGTGT CTAACCTTAG GCATCTTTTA ATAAATNTNA TTGCGACTCT 120  
GAAA 124

SEQ ID NO:2057

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02341

SEQUENCE DESCRIPTION:

GATCACTTCT GAATAAGCAG TTGCTTTTA TAAAACTTG CTGCCTGNCT AAAGATTAAAC 60  
AGGTATAGT TTAATNTGT AATTAATGCT ACCATCTTGC AATAAAGTGA CAATTGAATG 120  
NAACAGGGTT TTTCAAGTTG TATAATTCTC TGAAATACTC AGCTTTTGTG ATATGGGTAA 180  
AANTTAAAGA TGTATTGGN CTACAAA 207

SEQ ID NO:2058

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02342

SEQUENCE DESCRIPTION:

GATCTTACT CTTGAGAAAT GAATAAGCTT TCTCTCAGAA ATGCTGTCCC TATACACTAG 60  
ACAAACTGA GCCTGTATAA GGAATAAATG GGAGCGCCGA AAAGCTCCNT AAAAAGCAAA 120

SEQ ID NO:2059

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02343

SEQUENCE DESCRIPTION:

GATCCAAGGT ATCCNTAACA NTGGAGCAGC CAAGTTTNTT TTCAGGCACA ATGACCCTGA 60  
CCACCTAAAG AAAGTTNTAG AGAAGTNTAA CCCTAAGATA CCCAAAATTT TGGCCTTN 119

SEQ ID NO:2060

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS02345

SEQUENCE DESCRIPTION:

GATCCCCTCT TCTCAGACAG CGCCAGGCCG GGGTGGGGCC GGGGTTGGGG CCGAGCCCCA 60  
CAGGTGCCCC CCTCCNTCC CNTTTGTAT AATTTAATAA AGAAATGGTC GCGCTTCTGT 120  
TTTTAAA 127

SEQ ID NO:2061

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02346

SEQUENCE DESCRIPTION:

GATCGAGGTG GAGAAGATGC GCGGGGCGGA GNCTTATNAC CGNNTAGAGA ACAGCCCACA 60  
GNTGGATGGG AGCCCCCAGG GGCTCGAGGG TCTGCTGGGG GGCATTGGGG AGAAAGN 117

SEQ ID NO:2062

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02347

SEQUENCE DESCRIPTION:

GATCTGCTGA GGACACATGC GCTTTTGTAG AATTTAACAT CTGGTGTTT TCTGAAAAA 60  
TATATATACA TATATTGCTT TATTGAAAC AAATNAAAAT ATGCTGCATT TGAAG 115

SEQ ID NO:2063

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02348

SEQUENCE DESCRIPTION:

GATCTGGAGG AGGTGAAGGC CAAGGTGCTG CCCGCTGGGC CTCCAACGG GCCCTCCTCC 60  
CCTCCTTGCA CCGGCCCTTC CTGGTCTTTG AATAAAGTCT GAGTGGGCGG CAAA 114

SEQ ID NO:2064

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02349

SEQUENCE DESCRIPTION:

GATCCAAAGT ATCAGGTCTG TTAGTGGCCA TCAGCACTTT AATATTGCCT CGAGGAGGAT 60  
TTCTTGGNCN CNNAATAA GGTCAATTAAG TCTTATGCCA AATTCAGTGC TCCN 114

SEQ ID NO:2065

SEQUENCE LENGTH:113



SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02350  
 SEQUENCE DESCRIPTION:  
 GATCCTAGAT AAGCAGGTGA AATTTAGGCT TCAGAATATA TCCGAGAGGT GGGGAGGGTC 60  
 CCTTGGAAGC TGGTGAAGTC CTGTTCTTAT TATGAATCCA TTCATTCAAG AAA 113

SEQ ID NO:2066  
 SEQUENCE LENGTH:109  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02351  
 SEQUENCE DESCRIPTION:  
 GATCTACGCT GTGCCTTGGC AGGGCACAAT GACCTTNTAG ANATCCACCT GTTAGAACGC 60  
 CTAGGGGTCT GAACCGGGCT GGNCTGANN C TATCACCTCT TATGCACAN 109

SEQ ID NO:2067  
 SEQUENCE LENGTH:108  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02352  
 SEQUENCE DESCRIPTION:  
 GATCCCAAGG CCTAGCCTGT GAAGGTCTCC TATCGGAAGA NTACCCCAT NNAATGGGAA 60  
 GTGGAATTC TGGTCAANTT GGTCTTNATG CTCTGGAAGA CGTAAGAN 108

SEQ ID NO:2068  
 SEQUENCE LENGTH:108  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02353  
 SEQUENCE DESCRIPTION:  
 GATCTTAAGC AAAAATACTC ACTGAAATAG TATGTGGATG AATTCACCTA CTTACAATTT 60  
 TATGTTTCT TTGTAAATAA TAAATGTGAA TCTCAATTCT GCTTTAAA 108

SEQ ID NO:2069  
 SEQUENCE LENGTH:104  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02354  
 SEQUENCE DESCRIPTION:  
 GATCCTNGGC TCCACCTGGG TGGCCCTGAC CACGGGAGCC TTGGGCCTAG AGCTGCCCTT 60  
 GTCCTNCCAG GACCCCNCC TGGCCACTGC CCGCCTACTN NCTN 104

SEQ ID NO:2070  
 SEQUENCE LENGTH:408

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02355

SEQUENCE DESCRIPTION:

GATCAGAGCT GCTGAGTTCA GGATGCCTGC GTGTGGTTTA GGTGTTAGCC TTCTTACATG 60  
 GATGTNAGGA GAGCTGCTGC CCTCTTGGCG TGAGTTGCCGT ATTCAGGCTG CTTTGTCTGC 120  
 CTTTGGCCAG AGAGCTGGTT GAAGATGTTT GTAATCGTTT TCAGTCTCCT GCAGGTTTCT 180  
 GTGCCCCTGT GGTGGAAGAG GGCACGACAG TNCANGCGCA NGTTCCTGGG CTCCTCAGTC 240  
 GCAGGGGTGG GATGTGAGTC ATGCGGATTA TCCACTCGCC ACAGTTATCA GCTGCCATTG 300  
 CTCCTGTCC TGTTCCTCCA CTCTCTTATT TGTGCATTG GTTTGGTTTC CTGTAGTTTT 360  
 AATTTTTTAA TAAAGTTGAN TAAAANTATA AAAANAAGAG NNGGCGNN 408

SEQ ID NO:2071

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02356

SEQUENCE DESCRIPTION:

GATCAAAAGC TTATTCATCT TTTTCTTTT TCCTTTGGTG TAAAGCCAAC ACCCTGTTTA 60  
 AAAANCATAA TTCNTTAAN CNATTTTCCC TCTTCTCNT N 101

SEQ ID NO:2072

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02357

SEQUENCE DESCRIPTION:

GATCAAAAAA AGAGTTTGAA GCTAATTTT GCAAAATTCA GGCCAAAAAA GTAAGGCCAT 60  
 TATTTAACCC TGTGGCACCA TTAAATGTTG AAGAATGACA AA 102

SEQ ID NO:2073

SEQUENCE LENGTH:95

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02358

SEQUENCE DESCRIPTION:

GATCTTTTTT GTCAGTTTGT TTGTATGAAA CTAAAGCCNT TATTGTGTTA TAGTTCCTGC 60  
 TAAAACAATG AATAAAAACT CAAGGAGCAA CTAAG 95

SEQ ID NO:2074

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02359

SEQUENCE DESCRIPTION:

GATCGTCTCT AGGATGATAT GCATGTTTCA AGTGGTATTG AAAGCCGCAC TGATGGATAT 60  
GTAATAATAA ACATATCTGT TATTAATATA AA 92

5 SEQ ID NO:2075  
SEQUENCE LENGTH:101  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02360  
10 SEQUENCE DESCRIPTION:  
GATCTAAGTT AGGAAAGACG ATGGAGGTGG AATCCTTTAA GATTATNTCC AGTTATTTGC 60  
TTTAATAAAG AAGAAGTTAC CCTGTCAAA ATCAGAACAA A 101

15 SEQ ID NO:2076  
SEQUENCE LENGTH:87  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02361  
20 SEQUENCE DESCRIPTION:  
GATCTTCATT TATTTTAATG GTAATGGTTT TAAATATGT TCCTGATTGT ACATATTNTA 60  
AAATAACAT GTTTTTTAAC ATGCAAA 87

25 SEQ ID NO:2077  
SEQUENCE LENGTH:88  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02362  
30 SEQUENCE DESCRIPTION:  
GATCACAAAC ATTCAACAAA AAAGTAACT TATGTGACTT GGCAGTTATT CTATACCATT 60  
TCCTGTCCAT TAAAATTTT AAAGGAAA 88

35 SEQ ID NO:2078  
SEQUENCE LENGTH:85  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02363  
40 SEQUENCE DESCRIPTION:  
GATCCCATTT AATATTTAAA AAAATCAGTA GCACAAATAT ATNTNAATTG TCAACTTACA 60  
AAATAAAATA CATTTACAGT CTAAA 85

45 SEQ ID NO:2079  
SEQUENCE LENGTH:82  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02364  
50 SEQUENCE DESCRIPTION:

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GATCATCAAA AAAGAGGTAA TCTACGTTAT TTCCTATTCT AATGTCTTTT CCTAATAAAA 60  
AACTTCAACT TTCTAAGTTA AA 82

5 SEQ ID NO:2080  
SEQUENCE LENGTH:80  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS02365  
SEQUENCE DESCRIPTION:  
GATCCTTTCG GAATTGCACT TTTACATGTT GGGCGAATTT GTGTCCGTGC TGAAGTTTAT 60  
TAAAGGAAAA TAGATGGAAA 80

15 SEQ ID NO:2081  
SEQUENCE LENGTH:80  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS02366  
SEQUENCE DESCRIPTION:  
GATCAAGCCT TGCTTGAGAT TGGCCTTACC TCTGGNCNTT TTTTGTATA TGAGCTAATA 60  
AATNCTGTTT ATTGTTTAAA 80

25 SEQ ID NO:2082  
SEQUENCE LENGTH:80  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
30 CLONE:HUMGS02367  
SEQUENCE DESCRIPTION:  
GATCCATGAA GTNATTCAGT GGAAANATGC ACGTTNATAC TATTTNAGAG CACAAATAAA 60  
CTCACTATAC AATGGTCAAA 80

35 SEQ ID NO:2083  
SEQUENCE LENGTH:76  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS02368  
SEQUENCE DESCRIPTION:  
GATCAAACCT CAAAGCAGCT TTNACTTGGA ATTTAAAAAT AAACAGTTCA AAGATACTCT 60  
ACATTATCAC CNTAAA 76

45 SEQ ID NO:2084  
SEQUENCE LENGTH:70  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
50 CLONE:HUMGS02369  
SEQUENCE DESCRIPTION:

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EP 0 679 716 A1

GATCCATTTT ATGCAGGATT GTGTTGTTTT AACTGTTGTT GAGGAACTA ATAAATAATT 60  
AAATTGTAAA 70

5 SEQ ID NO:2085  
SEQUENCE LENGTH:64  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10 CLONE:HUMGS02370  
SEQUENCE DESCRIPTION:  
GATCTAAGAT GTCCAGGTC CTGGGAAGTT TACTCAATAA AGCTGGCTTT CCCCTGCCCT 60  
CAAA 64

15 SEQ ID NO:2086  
SEQUENCE LENGTH:64  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20 CLONE:HUMGS02371  
SEQUENCE DESCRIPTION:  
GATCCGTGTG AATGATGTGA ACATTTTATG AGTTTAAATA AAGTCATCTT ATGGTGTGAT 60  
TAAA 64

25 SEQ ID NO:2087  
SEQUENCE LENGTH:61  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

30 CLONE:HUMGS02372  
SEQUENCE DESCRIPTION:  
GATCTTAAAA TCAGTGATTA TCTTTTCTA AATAAAATAT CACCAGAATT CATCAGTTAA 60  
A 61

35 SEQ ID NO:2088  
SEQUENCE LENGTH:60  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

40 CLONE:HUMGS02373  
SEQUENCE DESCRIPTION:  
GATCTAAGAT GTCCAGGTC CAGGAAGTTT ACTCAATAAA GTGGCTTTCC CTGCCANAAA 60

45 SEQ ID NO:2089  
SEQUENCE LENGTH:66  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

50 CLONE:HUMGS02374  
SEQUENCE DESCRIPTION:  
GATCTCCGGG CAGCCACCAC CTCCTCGGTC TGCCCCCTCA TTAATAATTCA CGTCCCACC 60

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CTGAAA

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SEQ ID NO:2090

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02375

SEQUENCE DESCRIPTION:

GATCATGCAA AGAAAACTTC CAAAAGATT TATTAACCTA AACCAGCCTC TNTNGCAA 59

SEQ ID NO:2091

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02376

SEQUENCE DESCRIPTION:

GATCTCAAAT TGCCTCTGAA CCTTTTATAA GACAGTTTAT CTTCAAATAA ATTTATTTTG 60

CAATACCACG CAAA 74

SEQ ID NO:2092

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02377

SEQUENCE DESCRIPTION:

GATCAAAGTC TATTTTGCAT AAAATGTCCA ATAATTAAAT ATTGTTATAA AATAAA 56

SEQ ID NO:2093

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02378

SEQUENCE DESCRIPTION:

GATCGGCAGT TGGGAGGGGC GCTCTGAGAT TAAAGAGTTT TACCTCTGAG ATAAA 55

SEQ ID NO:2094

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02379

SEQUENCE DESCRIPTION:

GATCCANTCT TTGACAAACT GAAAAGAACT GAAAATAAAC ATTGCTCTTT CAAA 54

SEQ ID NO:2095

SEQUENCE LENGTH:52

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02380

SEQUENCE DESCRIPTION:

GATCCCTGCC CCTCCCCACT GGGACGGAAT AAATGCTCTG CAGACCTGGA AA

52

SEQ ID NO:2096

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02382

SEQUENCE DESCRIPTION:

GATCTGCTTA TAGAGCAGGA AGAATAAAGC CACCAACTTT TACCTAGCCC GGCTAATCAT 60

GGAAAGTGTGN CCAGGCTTCA AGTAACTTGA GTTTTAATTT TTTTITTTTC TTGGNAGAGT 120

AATGTAAAAT TTAATGTTGGG AAAGATATTT AANATTTAAT ACTAAGCTTT AAAAAGAAAC 180

CTGCTATCAT TGCTATGTAT CTTGATGCAA AGACTATGAT GTTAATAAAA GAAAGTACAG 240

ANGACACTTG GCATTCAAAG NTTAAA 266

SEQ ID NO:2097

SEQUENCE LENGTH:451

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02399

SEQUENCE DESCRIPTION:

GATCTAGAGA GTGCTCAGAA TTAGGGCCTG GCATTTGGAA TCACAGGANA TATCATCACA 60

GAAACAACCTG TTTTAAGATT AGTTCCATCA CTCTCATCCT GTATTTTNAT AAGAAACACA 120

AGAGTGCATA CCAGAATTGA ATATACCATA TGGGATTGGN GAAAGACAAA TGTGGAAGAA 180

ATCANNNGNC TGGAGACTAC TTTTGTGCTT TACAAAACCTG TGAAGGATTG TGGTCACCTG 240

GAACAGTCTC CAATCTATGT TAGCACTATG TGGCTCAGCC TCTGTTACCC CTTGGNITAT 300

ATATCAACCT GTAAACATGT GCCTGTAACCT TACTTCCAAA ATCAAANTCA TACTTATNG 360

AGGAANATTC TGATTTTNTA GANAAAAANT NGAGCNAGGN GATTATANCN TGTTTGCAAG 420

TCATGTGGTT TCTTTCTCAA TNGGGGGNNA N 451

SEQ ID NO:2098

SEQUENCE LENGTH:441

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02400

SEQUENCE DESCRIPTION:

GATCCCAAAC TGTTCCTTTT TTCATTTCTT GAAATGTTAC CACTACAGAC ATTTTTTNAA 60

GGTGAATAAA CAGTTGTNAT GTGCTGTACC TAAATCATG TTTAATCGTA TAAGGAAACA 120

TTTCAATACA CTTATACAGG AAGAAAACTA TAGATGAAGT ACATGTGTGT GATTCAGTCT 180

GATTCACAGA ATTCTGAGAG TAATATGGAA TAAACAACCT CCACTTAGAT GATAACTGAA 240

GCATTTCTG CTTGTGAAA ATTTGGNTTT TAAATGCTG TTAGAATGGG NAATTGGAC 300

ACTTTATATC ATTGTATANT TNCAGACTTT AGNTTCTGTA TCTNTTGGGA ACCATGGTTA 360

TAGCAAAACC NTTGGNAATA ATCCTGTTTC CNANACCNC CTNNATGTAA ACCTGGTATG 420  
CTTGGCTGGT AACNCCTAAG N 441

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SEQ ID NO:2099  
SEQUENCE LENGTH:440  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02401

SEQUENCE DESCRIPTION:

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GATCTATGTC TNCCTGCCTGG CTCCTAGATG GCTCTCCGGG CAGGTNCTGG CCAAGGACAT 60  
CATCTAGGCA GGGGGAGAGC CTGGNCTGAA CAGCTGTNAC CAAAACCTCC TTCTNCCCCA 120  
CCCTGCCCCC TCCACTTCCT GCCCTCTGTT CCATCTTCCC CCTTCCCAA GGCACAGCC 180  
TTTATTCCAG GCCCAGGGAT GTAGGAGGGG GAAGGAGGAA ACAGGAAGCC CAGAGAGGGC 240  
AAAGGGCCTA CCTCGGGGGC CGAACCATGC CCCANACTAT TATCTCAGGG CTTTCTGGGC 300  
ACTNGCACTT CAGCGTGGCC CACCTGCCCA TGGCCTGAGG CCAGTTNGCG AGGGGTGGCT 360  
CCTGAGGGTT TTTATAACCT TTGTTTGNTA ATGTTTAATT TTTGCATCAT AATTCTACA 420  
TTGTCCTGG AGTGTAAGAN 440

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SEQ ID NO:2100  
SEQUENCE LENGTH:411  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02402

SEQUENCE DESCRIPTION:

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GATCAAAAGG CTGAAAGGTT TGCTACCCA GCACGGCATC CCCTACAGG GGGCCACAGA 60  
AACTTCCAAC TTGGAGCACT TGGGCCACGA GACGCCCAGA GCCAAGTCTC CAGAGCAGCT 120  
GCGGGGTGAC CCAGGACTGC GTGGGAGTTT GTGACCTTGT GGTGGGAGAG CAGAGGTGGA 180  
CGNGGCCGAG AGCCCTACAG AGAAGCTGGC TGGTAGGACC CGCAGGACCA GCTGACCAGG 240  
CTTGTGCTCA GAGAAGCAGA CAAAACAAAG ATTCAAGGTT TTAATTAATT CCCATACTGA 300  
TAAAAATAAC TCCATGAATT CTGTAAACCA TTGCATAAAT GCTATAGTGT AAANAAATTT 360  
AACCAAGTGT TACTTTAAAC AGTTCGTACA AGTAATGNTT ATAATCTAA A 411

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SEQ ID NO:2101  
SEQUENCE LENGTH:408  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

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CLONE:HUMGS02403

SEQUENCE DESCRIPTION:

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GATCTGGAAG GCTTGAGCCT CCTTGGGTTT GTCTACAAAT TGGAAGGAAA TATGAATGAA 60  
GCCCTGGAGT ACTATGAGCG GGCCTGAGA CTGGCTGCTG ACTTTGAGAA CTCTGTGAGA 120  
CAAGGTCCCT AGGCACCCAG ATATCAGCCA CTTTCACATT TCATTTCATT TTATGCTAAC 180  
ATTACTAAT CATCTTTTCT GCTTACTGTT TTCAGAAACA TTATAATTCA CTGTAATGAT 240  
GTAATTCCTG AATAATAAAT CTGACAAAAT ATTAGTTGTG TTCAACAATT AGTGAAACAG 300  
AATGTGTGTA TGCATGTAAG AANGAGAAAT CATTGTATG AGTGCTATGT AGTAGAGAAA 360  
AAATGTTAGT TAACTTTGTG GGAATAAAA CATTGGACTT AACTAAA 408

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SEQ ID NO:2102

SEQUENCE LENGTH:397

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02404

SEQUENCE DESCRIPTION:

GATCCGAGAG GTGCCAACA AAGTCAAGGT CCCCTGCTG GATTAGGCA GGGCCAACT 60  
 GGCCATGCAC TCTATCCGN AGATGGCCTG CACCACAGGA GTCCTCCANA CCCTNACCCT 120  
 CTTCAAGGGC TTCTTAAAGC TGTTCCTTC TCTAAGCCAT AATCTCTNAG TGGATTGAGC 180  
 CCTCTTGAA AGACTTCTCT GCCATCCCTT TGCACCTGAN AGGGGAAGTT CTCAGCTGAG 240  
 CTGAAGCTGG ATTATTAAAG TGGATTGTAA CTCAGACTCT CCGTGCTACG CTTATTTGGA 300  
 GACTAGAGGA GTGGGAGTTG AGCCTGGCTT GAACCTTTGG AACCAGAAAA GTTGGGGAGC 360  
 AGGTGGAGGA GGCCACACTC CTGGGAGCTT GATGGTN 397

SEQ ID NO:2103

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02406

SEQUENCE DESCRIPTION:

GATCAGCCCT TTTCCCATC CTGCCCTATG GTTCTCTAGC CACCTGTGCA TGCATGTGTA 60  
 TTTCTGCCN GTTCTATGGT GTGTGGATGT GTGTGCATGA ATCTGTCATA TAGAGGGGGT 120  
 CCGAGCTGGA ATCCTAGAGC ATTGCTGCCC TGGGGCCTGA TGTCTTGGC TTCCTCAGAG 180  
 CATGTAACAG GAAATTAAAT GGGATGAGTG TTTGGTAAA 219

SEQ ID NO:2104

SEQUENCE LENGTH:380

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02408

SEQUENCE DESCRIPTION:

GATCCTACCT CCAACTCCTG ACTCTATAGG TCTCACTCTT TTTTATTGT CCTANNNTA 60  
 CATAACATAA AATTTATAAA TTAAATATTC TAGGGTATAG TTCAGTGGTA TTAAGTACAT 120  
 TCACACTGAT GTGCAACCAT CATTATCATC CATTCCCAA ACTTTTCATC ACCGCAAATA 180  
 GAAAAGCTGT ACCCATGAAA CAATAACTTC CATTGCCTCC CCCTCAGCCT TTGGTAACCT 240  
 CTATTCTACT TTCTGTTTCT ATGAATTGGA CTGTTCTAGG TACCTCATAT AAGTGGAATC 300  
 ACACAAATATT TGTCCCTTTG TGTCTAACTT ATTTCACTTA GCATGTTTTT AAGATTTATC 360  
 TGTACTGTAC CATGTATCAN 380

SEQ ID NO:2105

SEQUENCE LENGTH:378

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02409

## SEQUENCE DESCRIPTION:

GATCTGTGCT CTCCTAGCCC AAGAGACCCC TGGAGGGGCT GGAGTTTAT CCAGCGNCTC 60  
 GTCGTATGTT TGGCTGAGCA CCTGTGGCCT GGGTGCAGGT TAACTTCTTG TTATCAGGAG 120  
 CCCACTATGC AGAGGCCAAA GGTCGGCAGC CAGCGAGGCT ATGAATTGGA CCTTTTGGT 180  
 ATCTGTGTNA CTGNTCTGTG NCCATNCTTA GNCAACTTGC TGGCGTGACA AGTGCCACACA 240  
 AGTAACACAC CAGGTACCCA GAGNAGGGTG GACAGGAGAG ACCTGAATNA CAGCAGTANG 300  
 GAATTCCTCA ANGNTGTGNC CTCGCCCATG AANTTGTTC AANTTGAAGG TNANNAGGGN 360  
 CACCAATCAG GGTGAGN 378

SEQ ID NO:2106

SEQUENCE LENGTH:374

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02411

## SEQUENCE DESCRIPTION:

GATCCAGAAG TACAAGGTGG TCCTGGCCCC GGAGACGGNG GAGTTGAAGA GTGTGGCCCG 60  
 CATTGTCCTG GTTCCCAATA AGAAAGTGGG CCTGCAGTTC CTGCAGAGAC AGTGCTGAGC 120  
 TGAGTCTCCG CCTTGTCTGG GCTTGTCTTA GAGGCTCCAG CTCTGGCACA GTGGTTCCTG 180  
 GCTGCTGCCA TGTCTCANAT GAGGAGGGAG AGAAGGAGGC CGCCAGACTC GAGAGGTGGG 240  
 AGGAACTCCT TGCACACACC CTGAGCTTTT GCCACTTCTA TCATTTTGA GAACTCCCTC 300  
 TCAGCTAAAG GGCCACCCCTT TTATCGAATG CTGTCCTTGG GAAGATATAA AATAAAGGGC 360  
 TNTTATTTCT TAAA 374

SEQ ID NO:2107

SEQUENCE LENGTH:369

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02412

## SEQUENCE DESCRIPTION:

GATCCAGCCC GACCTGCGAG ANTGATGGAG ACCATGCACC GCATGAGCCA CCTCCCACCC 60  
 GACTTTGAGG GCCGCCAGAC GGTGAGCCAG TGGCTGCAGA CCCTGAGCGG ATGTGGCGGT 120  
 CAGATGAGCT GGACGACTCA CAGGTGCGTC AGATGCTGTT CGCCTGGAGT CAGCCTACAN 180  
 CGCCTTCANC CGCTTCCTNA TGCCTGAGCC CGGGGANTAG CCTTGNACAG CCGGGAGAGT 240  
 CTGAGGCNTG GTCCTGGTCC CTGTCCGCAN AGAGGCCGTG NNATCACANA GCTANTGTCT 300  
 GAGTGGCTGT CTGGNTCTGC TTTGGGTAAG ACTTTGGGGC CGGCCTCCCA NAATAAGGTG 360  
 TCTCGGAAA 369

SEQ ID NO:2108

SEQUENCE LENGTH:368

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02413

## SEQUENCE DESCRIPTION:

GATCAGAGCC AAGAAGCGTC TGCGGCAGAG TGGGGAAGAG TTGCCGCCAA CCTCCTAGGC 60  
 GCCCGGCCCA GCTCCCTTTG ACCCCTGGGG CAGGGCAGGG GGCAGGGAGA GACAAGGCTG 120

CTGCTATTAG AGCCCATCCT GGAGCCCCAC CTCTGAACCA CCTCCTACCA GCTGTCCCTC 180  
 AGGCTGGGGG AAAACAGGTG TTTNATTTGT NACCGTTGGA GCTTGGATAT GTNCGTGGCA 240  
 TGTGTGTGTN TGTGTNANAG TGTGAATGCA CAGGTGGGTA TTTAATCTGT ATTATTCCCC 300  
 GTTNTTGGAA TTGNNTTCCC CNATGGGNCT GGGGTACTTT ACATTCAATA AATACTGTTT 360  
 AACCCAAA 368

SEQ ID NO:2109  
 SEQUENCE LENGTH:368  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02414

SEQUENCE DESCRIPTION:  
 GATCACAGGA AGTGGAGGAG CCAGAGGTGC CTTTGTGGAG GACAGCAGTG GCTGTGGGA 60  
 GAGGGCTGTG GAGGAAGGAG CTTCTCGGAG CCCCTCTCA GGCTTACCTG GGCCCTCCT 120  
 CTAGAGAAGA GCTCAACTCT CTCCCAACCT CACCATGGAA AGAAAATAAT TATGAATGCC 180  
 ACTGAGGCAC TNAGGCCCTA CCTCATGCCA ACAAAGGGT TCAAGGCTGG GTCTAGCGAG 240  
 GATGCTTGAA GGAAGGGAGG TATGAGACCG TAGGNANAAN GGCACCATCC TCGTACTGTT 300  
 GTCATATGA GCTTAAGAAA TTTGATACCA TAAAATGGTA AAGACTTGAA AAAAGTANAA 360  
 NATGTTTN 368

SEQ ID NO:2110  
 SEQUENCE LENGTH:368  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02415

SEQUENCE DESCRIPTION:  
 GATCTTGGTT TTGATGTGA CATAGGCCCT CTTTCCAGA CTCCTCGTGA AGTGGCCCAG 60  
 CAGGCTGTGG ATGCGGATGT GCATGCTGTG GCGTAANAC CCTCGCTGCT GGTCAATAAA 120  
 CCCTAGTTCC TGAATCATC AAAGAACTTA ACTCCCTTGG ACGGCCAGAT ATTCTTGTC 180  
 TGTGTGGAGG GGTGATACCA CCNTCAGGAT TATNAATTTC TGTGGAAGT TGGTGTTC 240  
 AATGTATTTG GTCCTGGGAC TCGAATTCCA AAGGCTGCCG TTCAGGTGCT TNATGATATT 300  
 GAGAAGTGT TNGAAAAGAA GCAGCAATCT GTATAAATA AAAATATCAC AAGAGAACAC 360  
 CTGTACTN 368

SEQ ID NO:2111  
 SEQUENCE LENGTH:365  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02416

SEQUENCE DESCRIPTION:  
 GATCGAAAGA AATCTAAGTG ATACGGCCCA ATGAAGCTAA AATATAGCCT TCTGTAAAGC 60  
 AAATAGTATT TCCTTTCCCC AAGTAGTTCA TTTCTAGAT GCTTGTCAAA TGAATTAATG 120  
 TCCTCTGATG AAGAGTGTCC TTCCGTTTCT AAGGTCTTCT CAATCTCAGC AATAGAGCTT 180  
 CCCAGCAGCG TTCAAGACAC ATCATTATA CACAGGCACA GGGGCCTTCC TGAATGGGT 240  
 GCATTTTAC CAACTACAAT CATGTAATTT TTTTGAAAT TTTTAAAAAT TTTGNTNCT 300

TTACATTACA ATTGGGTGAA ACACATTTTA CAGCTCTCAA TAAATGTTTG CTGGTCGCTC 360  
TGAAA 365

5 SEQ ID NO:2112  
SEQUENCE LENGTH:363  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02417

10 SEQUENCE DESCRIPTION:  
GATCAACGAT TACGTGGAGA AGGGTACTCA AGGGAAAATT GTGGATTTGG TCAAGGAGCT 60  
TGACAGAGAC ACAGTTTTTN CTCTGGTGAA TTACATCTNC TTTAAAGGCA AATGGGAGAG 120  
ACCCTTTGAA GTCAAGGACA CCGAGGAAGA GGACTTCCAC GTGGACCAGG TGACCACCGT 180  
15 GAAGGTGCCT ATNATGAAGC GTTTAGGCAT GTTTAACATC CAGCACTGTA AGANGCTGTC 240  
CAGCTGGGTG CTGCTGATGA AATACCTGGG CAATGCCACC GCCATCTTCT TCCTGCCTGA 300  
TGAGGGGAAA CTACAGCACC TGGAAAATGA TTGACCAAAA TACCAAGTCT CCCCTTCTTC 360  
ATN 363

20 SEQ ID NO:2113  
SEQUENCE LENGTH:362  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02418

25 SEQUENCE DESCRIPTION:  
GATCCCAGTC GCATACCAGG TGTCTCTCTC CAGGTCGTGA ACGGCAAAGG CACTGCCCCG 60  
ATCGCCATAG CAGGTGTCTT CTTGGTACTT AGACATGCCA GCACAGAAGG TGTGTTTATT 120  
CAGTATGGGC TGCACCCCTA CAGGGCTCTT CGGTGTCTTC CATCCAGGAC TGGGTTTACA 180  
30 AGACCATAGC TGAGAACTAA TGCAAGGCTG GCCGGAAGCC CTTGCCTGAA AGCAAGATTT 240  
CAGCCTGGAA GAGGGCAAAG TGGACGGGAG TGGACAGGAG TNGATGCGAT AAGATGTGGT 300  
TTGAAGCTTG ATGGGTGCCA GCCTGCATTG CTGAGTCAAT CAATAAAGAG CTTTCTTTT 360  
GN 362

35 SEQ ID NO:2114  
SEQUENCE LENGTH:362  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02419

40 SEQUENCE DESCRIPTION:  
GATCNGACAG GCACCAGCAA TGACACAGCA TAAACTGTTG GGCACAGGAA AGAGGCTTGA 60  
CACCACCAGC CCACCAGGAA ATGCAGTTCA GCCACCACGA GGACACGAGG AACCTGCACC 120  
45 ACAGCCGCAG TCAAGAGAAT GCTGGTGGTG CCAAGNTGCA GGGTGTGGCC TGCTGGAATG 180  
GAAGCGCATG GTGGTNNCTA TAAAGTCAAT GNCACAGCAC ATGCCACGCA ATCCACTGTG 240  
GGATTNGNGA TGANACTANG CNCATAAAAC TGTNCGAATT TTNCTGTGCT TTTCATATCN 300  
TCAATNTGAA TCAANTGCTT CATTGGGTAC TGTAAGTGTG GNTACTTNAG TGAATCTCTN 360  
TN 362

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SEQ ID NO:2115

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02420

SEQUENCE DESCRIPTION:

GATCATATAG TAGGTTTAGG TTAACTTTT TAAGAAATTG CCAAGCTTTT CCAAAGTGGC 60  
 TGTCCCTCTT TACATTCCA CCAGCAATGT ATAATGAATG GTTCAGGTTT CTCCACATTC 120  
 TTGTCGGCAC TTGGACTTTT CTGTTTGTG GTAGCCATTC TAGTGGATGC AAAGTGGCAT 180  
 CTCATTATGG TTCATTGCA TTTCTCTGAC AACTAATGAT TTTGAGCATC TTCATGCGAT 240  
 TGTTAACCAT TTGTATATCT TTAGTGAAAT ATCTATTCAA TTATTGCCCA TTTTAAATT 300  
 GGNTCACATG GCTNATTAAT GNATTGTAAG AAAGGTTTAC ATATTCTTGG ATACN 355

SEQ ID NO:2116

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02421

SEQUENCE DESCRIPTION:

GATCATGATT TTGTAGTACA GGAAGACTTC ATGAAAGCAG TCAGAAAAGT GGCTGATTCT 60  
 AAGAAGCTGG AGTCTAAATT GGAATACAAA CCTGTGTAAT TTAGTGAAG ATTTTGATG 120  
 GCTGCATGAC AGANGTTGGC TTATTGTAAA AATAAAGTTA AAGAAAATAA TGTATGTATT 180  
 GGTAAATGATG TCATTAAAG TATATGANTA AAAATATGAG TAACATCATA AAAATTAGTA 240  
 ATTCAACTTT TAAGATACAG AAGAAATTG TATGTTTGT AAAGTNGCAT TTATTGCAGC 300  
 ANGTACAAA GGGGAAGTGT TGAAGCTTTT CATATTTGCT GCGTGACATN 350

SEQ ID NO:2117

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02422

SEQUENCE DESCRIPTION:

GATCCGCAGN CAGAAGCTCT GCCCTTCTGT ATCCTATGTA TGCAGTGTNN TTTTNCCTTC 60  
 CAGCTTGGGC CATTCTTGCT TAGACAGTCA GCATTTGTNT CCTCCTTTAA CTGAGTCATC 120  
 ATCTTAGTCC AACTAATGCA GTCGATACAA TGCCTAGATA GAAGAAGCCC CACGGGAGCC 180  
 AGGATGGGAC TGGTCGTGTT TGTNCTTTN TCCAAGTCAG CACCCAAAGG TCAATGCACA 240  
 GAGACCCCGG GTGGGTGAGC GCTGGCTTCT CAAACGGCCG AAGTTGCCCTC TTTTAGGAAT 300  
 CTCTTTGGAA TTGGGAGCAC GNTGNNCTCT TGAGTTTGA GCTTTTAAAA GTACTTTNTT 360  
 TACCACATTT GGAAA 375

SEQ ID NO:2118

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02423

## SEQUENCE DESCRIPTION:

GATCTCTAAC CAGAAATAAA CAGGAAGACT CAGTNGTTTA CAAAAGACAT TTTAGTTTTA 60  
 CACGTACAGA AAATTCTACC CNGGCATTAC AGAATTCTTA GACTTCTTAA ATTCTTGATT 120  
 TTCCTTGGTA TTTACATTTT GATAAGGGAG CCAATGGTTC TTCAAACATT TGAAGAAGAAC 180  
 ACATACACAC TGGACAATTT CAAACGNTAC AAACAAACGC AACTGTCCTT CTTTCTCATT 240  
 CCTGTCTTC AGCCACCCAG TTTCTTCTCC CCTGAGGGAA TCAGTTATCA TTNGCTGGGT 300  
 CATACTTCCA GATTATCCTG TGCCTATGTA AGTGTGTGN 339

SEQ ID NO:2119

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02424

## SEQUENCE DESCRIPTION:

GATCTGGGAC GTNCACGAGT NAGGGGCTGG CCACCCAGCC CACAGCCTTG CCTGACCACC 60  
 CTCCAGCAGA TAGACGCCGG CACCCCTTCC TCTTCTAGG GTGGAAGGGG CCCTGGTNCN 120  
 NGCCTGTAGA CCTATCGGNT CTCATCCCTT GGGATAAGCC CCAGTCCAGG TCCAGGAGGC 180  
 TCCNTCCCTG CCCAGCGAGT CTTCCAGAAG GGGTGAAAGG GTTNCAGGTC CCGACCACTG 240  
 ACCNTTCCCG GGTGNCCTCC CTCCCCANCT TACACCTNAA GCCCAGCAGC NAGTAGNCTT 300  
 TGAACAGAGG GAGGGAAGGA CCCATGGGTC TCCN 334

SEQ ID NO:2120

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02425

## SEQUENCE DESCRIPTION:

GATCAAAGAG AAAATAAAAA ATCGCTACTT CCCTGCCTTT GAAAAAGTCT TAAAGAGCCA 60  
 TGGACAAGAC TACCTTGTTG GCAACAAGCT GAGCCGGGCT GACATTATC TGGTGGAAGT 120  
 NCTCTACTAC GTCGAGGAGC TTGACTCCAG TCTTATCTCC AGCTTCCCTC TGCTGAAGCT 180  
 CTCCAGGACA CTGGCCCCC ACACTGTATC TCTCACTGAG AAAAGGTGGT CCCATGGCCC 240  
 TGAACACAG AATNAGCAAC CTGNCACACA GTGAAGAAGT TTCTACAGCC TNGGCAGCCC 300  
 AAGGAAAGCC TCCCATTTGA TGAGAAATCN 330

SEQ ID NO:2121

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02426

## SEQUENCE DESCRIPTION:

GATCGAAGTA AAATAGAAAT GGGACTNGCT TTCCACAGGA AGTAAACTGC TTCAGAGCCC 60  
 ACAGTCCCT GTCAGTGTG CGGAAAGAAG TCAGTCATCC CTGTTGGCAG TAAATCTTCC 120  
 CACAGGCCGT CCATTAGAGA TTTAACTAGA TATGTTCAAT AGAAAGAGTC TGAGGCAAGT 180  
 GGAATGAGG NNCGGAACT TAGGTTGGGA GAATATTTT NNTNTATTCA TTCTGTTTGC 240  
 TTAATTCAGA GTACAGTTG TGCTATTCA TATCTGTACT CCAGGCAGAA ATATAACTTG 300

AAAATACTGT GTCTAAAGAA ATTTTCAN

327

SEQ ID NO:2122

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02427

SEQUENCE DESCRIPTION:

GATCCTCGTC ATCAAGGATG GCTGCATCGT GGAGAGGGGA CGACACGAGG CTCTGTTGTC 60  
CCGAGGTGGG GTGTATGCTG ACATGTGGCA GCTGCAGCAG GGACAGGAAG AAACCTCTGA 120  
AGACACTAAG CCTCAGACCA TGGAACGGTG AAAAAAGTTT GGCCACTTCC CTCTCAAAGA 180  
CTAACCAGGA AGGGAATAAG ATGTGTCTCC TTCCCTGGC TTATTTTCATC CTGGTCTTGG 240  
GGTATGGTGC TAGCTATGGT AAGGGAAAAG GACCTTCCG AAAACATCT TTNGGGGAA 300  
ATAAAAATGT GGACTGGTGC GAGN 324

SEQ ID NO:2123

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02428

SEQUENCE DESCRIPTION:

GATCTGAACA TTCAAAGAA AGCTTTGGAA AAAAGAGCT GGCTGGCCTA AAAACCTAAA 60  
TATATGATGA AGATTGTAGG ACTGTCTTCC CAAGCCCAT GTTCATGGTG GNNCNNTGGT 120  
TATTTGTTA TTTTACTCAA TTGGTTACTC TCATTGAAA TGAGGGAGGG ACATACAGAA 180  
TAGGAACAGG TGTTTGCTCT CCTAAGAGCC TTCATGCACA CCCCTGAACC ACGAGGAAAC 240  
AGTACAGTCG CTAGTCAAGT GGTTTTAAA GTAAAGTATA TTCATAAGGT AACAGTTATT 300  
CTGTTGTTAT AAAACTATAC CCACTGCAAA AGTAGTAGTC AAGTGTCTAG GTCTN 355

SEQ ID NO:2124

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02429

SEQUENCE DESCRIPTION:

GATCTCAGAA CTGAAGGCCG CCTTGACATG AAGACTGAGC TCTTTTCCAG CTCATGCCCA 60  
GGTGAATCA TGCTGAATGA GACAGGCCAG GGTACCAGC GCTTTCTCCT CTACAATCGC 120  
TCACCACATC CTCCGAAAA GTGTGTGGAG GAATTCAAGT CCCTGACTTC CTGCCTGGAC 180  
TCCAAAGCCT NCTTATTGAC TCCTAGGGAA TCAAGAGGCC TGTGAGCTGT CCAATAACTG 240  
ACCTGTAAGT TCATCTAAGT CCCAGATGG GGNACANTGG GGAGNTNGAG TTGTTGGAGG 300  
GAGGAAGCTT GGAGACTTCC CAGN 324

SEQ ID NO:2125

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS02430

SEQUENCE DESCRIPTION:

5 GATCCATCTT CATCCATTGC ATTGGAACT NCTTTATGCT GCTGCAGTCT GCAAAGTCTA 60  
 GAGCTTTTAT CAGGCCATGT CATACCCAAG AAAGCACCTA TTAAAGAAA AAACAATTCC 120  
 CTGAGCTCTC AACTCCAAGT TGTAAGATTG GTGTCTTCCT TGTCCTTACT TAAAAAGTC 180  
 ATGTGTTAAT TTNNTCCTG CCTGTATTG TATGCAAAAT GTCCTCTATC TGCTATNAAA 240  
 GAAAAGCTAC GTAAACCACT ACATTGTANC CTTCTAAGTN ATTNTTAATT AGNAGGGNAT 300  
 TATNTTGCAG TACCANTTGG GAAA 324

SEQ ID NO:2126

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS02431

SEQUENCE DESCRIPTION:

20 GATCGTGAAG ACCTGCTGAG CCAGCCTGTT CTCGGGGCCT GAATGTCTGG GGTGCTTGTG 60  
 CCTTTTCTGA GAAGCGTTGT GACTGCTCAA CATCCCCATC AAGGTTTGAG TCCACAAAAG 120  
 TGGACCTCCC TATCATGCTT CCCCTTCCCT CTAGCATGTG GGAAGGGACT GCTGTGAAGA 180  
 ATGNCAGATG TGGGGCCTCT GCCAAGTCTT TGCATTGCTA AATAAGGGCT TCCTCTGCCT 240  
 TCTACCTACA GTGCATTGA ACTGCCTTCT GAAAGAGGTC CAGGGAGGGA TTAGGAAAT 300  
 AAAGNTTCTA CCTATTGAA A 321

25 SEQ ID NO:2127

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS02432

SEQUENCE DESCRIPTION:

35 GATCCTAAGC GAAGATGGAT TTCAGTTCAT CAAATCATCA TTAATGACTT TATGTATTAT 60  
 TTGCACAGGG AGAATTGAAA CTGAGTATAA TCAATAAGCT AGATACGAAA TCAGTTTCTC 120  
 AAACTGAGCT TCAGAAAGGG GCATTTTGTA CTCTTGTTTT TGCATAACTG GTTTTGTTTT 180  
 TTTGCAGAA TAACTATAAC ANTCACTGGC TACCGAAGTA AACTGATGTA CTGAATTCCA 240  
 TAATACATAA CATTCAATTT TTACCACTNC TGTTTAGCGA ACTTGATATC TTATTTCTCG 300  
 TTCAGNTTAA AAAAAGAAA 319

40 SEQ ID NO:2128

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS02433

SEQUENCE DESCRIPTION:

50 GATCACACCT GAAAGCAGTG GTCCCAGCTC TGTGCTGTGG GACATCACAG GTCCTAAACA 60  
 GTGATAGAGA AAGGGCTGGG GAGTGGCAGC TGGAACTCTT GCTTCCGTCT GAACATCTGG 120  
 ACACACATGT CAGAGAATCT TTGCATTAAA TGGACTGCCC AATCTATTG GTGATTAAT 180  
 GGCTGTGCGG TGAGGGGAGA ACCCTGGGCA GTCTGGAGAC TGAGGTGCCA TTCTCGGCTA 240

55



GAGACACCAC CCAAAGAAGA GATGGGCTGG CTAATAAAGA CAAGTNTCAG TTGAATAAAAT 300  
GTCTTTAAAC CTAAT 315

5 SEQ ID NO:2129  
SEQUENCE LENGTH:311  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS02434  
SEQUENCE DESCRIPTION:  
GATCATTGTC CCTACAGACA CCCAGAACAT CTTCTTCATG AGCAAAGTCA CCAATCCCAA 60  
GCAAGCCTAG AGCTTGCCAT CAAGCAGTGG GGCTCTCAGT AAGGAACTTG GAATGCAAGC 120  
TGGATGCCCTG GGTCTCTGGG CACAGCCTGG CCCCTGTGCA CCGAGTGGCC ATGGCATGTN 180  
15 TGGCCCTGTC TGCTTATCCT TGGAAAGTGA CAGCGATTCC CTGTGTAGCT CTCACATGCA 240  
CAGGGGCCCA TGGACTCTTC AGTCTGGAGG GTCCTGGGNC TNCTGACAGN AATAAATAAT 300  
TTCGTTGGAA A 311

20 SEQ ID NO:2130  
SEQUENCE LENGTH:309  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02435  
25 SEQUENCE DESCRIPTION:  
GATCCCAACT GCTCCTGCGC CGCCGGTGAC TCCTGCAAAT GCAAAGAGTG CAAATGCACC 60  
TCCTGCAAGA AAAGCTGCTG CTCCTGCTGC CCTGTGGGTT GTGCCAAGTG TGCCAGGGC 120  
TGCACTCTGCA AAGGGGCGTC GGACAAGTGC AGCTGCTGCG CCTGATGCTG GGACAGCCCG 180  
CTCCAGATG TAAAGAACGC GACTTCCACA AACCTGGATT TTTTATGTAC AACCTGACC 240  
30 GTGACCTTTT GCTATATTCC TTTTCTATG AAATAATGTG AATGATAATA AAACAGCTTT 300  
GACTTGAAA 309

35 SEQ ID NO:2131  
SEQUENCE LENGTH:307  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02436  
40 SEQUENCE DESCRIPTION:  
GATCCTGGCC TCGCAGTTCC TATCCNTGA CCCAGAACAG CTCACCAAGG AGCTGCAGCA 60  
GCATGTGAAG TCAGTGCAGC CCATACAAGT CCCAAANAAG ATAGAGTTTG TNTTGAACCT 120  
GCCAAAGCTG TCACAGGGAA ATTCAACAGA CCAAACCTCG NGNCAAGGAG TGAAGATGT 180  
CCGGAAGAGC CCGTNCAGT GAGNCGCTA GGAGCATTCA TTTGGATTCC CTCTTCTTTC 240  
45 TCTTTCTTTT CCCTTTGGGC CTTGGCTTAC TATNATGATA TGAGTCCTTT ATGAAGACAT 300  
GATGAAA 307

50 SEQ ID NO:2132  
SEQUENCE LENGTH:306  
SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS02437

SEQUENCE DESCRIPTION:

5 GATCCTGGTG GCGACCATGG AGAGGAACT GGAGGGCAGG GATGGAGCTG AAANCTTGGC 60  
 GGCCAGAGA GAGGTCCACC CCAAGCAGCC TGAGCCCTCA GCCACCCCCC AGCTCCCTGG 120  
 CAGTCCCCCT CCACCTGCCA ATGTCAGCGC CACACTGGTG TCTGAAAGGA ATAAGGAGAA 180  
 CAGGACAGAC TAACTTTTTA AATGATATGA AGAAATCAGA GGTGAAAATT GTACATTGGG 240  
 10 AATATATTTA TGCAAATTTT ATTGAAATTT ATTGTAAATA AAGATTTTCT CAGTGGTCTA 300  
 GANAAA 306

SEQ ID NO:2133

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02438

SEQUENCE DESCRIPTION:

20 GATCTGGGCT GGTCCCTTTC CCATAAAATN AGGTCCCTGG TTGTATGTTT CCATAGCACC 60  
 CCATACTTCC TCTCTNAGAA TAATCATTTT CCTTGTAATG CTCAGCATCC GCATCCTGCT 120  
 TGACTGCAAA CTGTCTGAAG GTAGGGACTG TTTGTCTTGG ACTTCGCTGC CAGTCCTTAG 180  
 AACAGTGTCT GGGACACAGT GTGTTCTCAA ATATTTGTTG CTGGAATAAA TGAATGACCT 240  
 25 AAATCAGTCT TTTAGGGATT TACTGTAAAC CACCATGGGA AAATTAAATA AATGCGGGGA 300  
 AGGAAA 306

SEQ ID NO:2134

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02439

SEQUENCE DESCRIPTION:

35 GATCTGACCC CACAGCCTTT GGCCTGCTCA CCGGACCAGC CTGGGCCGCA TTCCCTGCAG 60  
 GACCTCCCGG GTCAGGCAGG GCGGCCCCCT GCTCCACACA CTGCTGCATC TTGGGTCTCA 120  
 GGGACCCAGA CAGATGGACT TACATGGAGC TGGGCACTGC CCTGCCTCAA CAGGGTCCAT 180  
 TGCCTCCTCG CCTCCAGAAC TTGGAGCAGG GAAGTGGGCA CCCTGAGGCC TCCAGCACCA 240  
 GTTCCGTCAT TCTCGTTCCT GGGGAACCCC CACTCTGACC TGTATTATAA GTTCACATTT 300  
 40 TGAAA 305

SEQ ID NO:2135

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02441

SEQUENCE DESCRIPTION:

50 GATCAACCTG AGAAAAATTG CTGAGCTCAT GCCAGGAGCA TCAGGGGCTG AAGTGAAGGG 60  
 CGTGTGCACA GAAGCTGGCA TGTATGCCCT GCGAGAACGG CGNGTCCATG TCACTCAGGA 120  
 GGACTTTGAG ATGGCAGTAG CCANGGTCAT GCAGAAGGNC AGTGAGAAAA ACATGTCCAT 180

CAAGCANTTA TGGANGTGAG TGGACAGCCT TTGTGTGTAT CTCTCCAATA CAGCTCTGTG 240  
GGCCAAGTAA A 251

5 SEQ ID NO:2136  
SEQUENCE LENGTH:301  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS02442  
SEQUENCE DESCRIPTION:  
GATCTGCATC CCCAAAAGTA TCACTCCTTC TCGAATCCTT CAGAACATCA AGGTGTTTGA 60  
CTTCACCTTT AGCCCAGAAG AGATGAAGCA GCTAAATGCC CTGAACAAAA ATTGGAGATA 120  
TATTGTGCCT ATGCTTACGG TGGATGGGAA GAGAGTCCCA AGGGATGCAG GGCATCCTCT 180  
15 GTACCCCTTT AATGACCCGT ACTGAGACCA CAGCTTCTTG GCCTCCCTTC CAGCTCTGCA 240  
GCTAATGAGG TCCTGCCACA ACGGAAAGAG GNAGTTAATA ANNGCCATTG GANGCATNAA 300  
A 301

20 SEQ ID NO:2137  
SEQUENCE LENGTH:302  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02443  
25 SEQUENCE DESCRIPTION:  
GATCCGAGAG GGCATGGCCG CCCTGCAGTC TGACCCCTGG CAGCAAGAGC TCTACCGCAA 60  
CTTCAAAAGC ATCTCCAAGG CCTTGGTGGA GCGGGGTGGT GTGGTCACCA GCAACCCACT 120  
TGGCTTCTGA ATACTCCCGG CCAGGGCCTG TCCCAGTTAT GTGCCCTCCC TCAAGCCAAA 180  
GCCGAAGCCC CTTTCCTTAA GGCCTTGTT TGTCCCGAAG GGCCCTAGTG TTCCAGCAC 240  
30 TGTGCTGCT CTCAAGAGCA CTTACTGCCT CGNAAATAAT AAAAATTCT AGCCAGGTCA 300  
AA 302

35 SEQ ID NO:2138  
SEQUENCE LENGTH:297  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02444  
40 SEQUENCE DESCRIPTION:  
GATCATCCAG AAGGAGCCCG TTGAAGTGGC CCCAAGCCAG CTCTCTGCAT TTCGTACTCT 60  
CCTGTTTTCT GCACTTGGTG AAGAGGAGAA GATGATGGTG AACAACTATC GCCCACTTCA 120  
ACCCTTGATG AACCGGAAGG TCTGGGCGTC CTTCCAGGCC ACTAATGAGG GCACAAGGTC 180  
CTAGAGACAT TAGGTCCACA TGAATAGCAG AACTGACTTT GAAGGAAGGA AGCGTTGTTT 240  
45 CCCAAGTTTC ACAATGTGAT TGTACATGAC TTCTGAAATT AAAAAGAGAG CATGAAA 297

50 SEQ ID NO:2139  
SEQUENCE LENGTH:295  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

55

CLONE:HUMGS02445

SEQUENCE DESCRIPTION:

5 GATCTATGCC AGCAAAACAT CATTTTGAGA CAAACATTTT TGTGGCAGAT GTTTTCCTA 60  
 AAAAGTACTA TATCATCCAA GAAATATTTG AGTAAATCC CTTGTTCTTT TGGGTGACAT 120  
 TAACTGACAT TTGCTTTTTT TCAAGACCTA ATAGAAAATA AGAAAGCCCA TAATGTATTT 180  
 AGAAACAGGA ATCCTCAGAG CAATTCTCTG TATTCTCATA TAATTTCAAT GTAAACAGA 240  
 AAACATATTG ATGTGTTGGT GATAGGCTTG AATTATTA AAATTCAAAA ACAA 295

10 SEQ ID NO:2140

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15 CLONE:HUMGS02446

SEQUENCE DESCRIPTION:

20 GATCGAGGCT GCAGGATATG CTCAGACTCT AGAGGCGTGG ACCAAGGGGC ATGGAGCTTC 60  
 ACTCCTTGCT GGCCAGGGAG TTGGGGACTC AGAGGGACCA CTGGGGGCA GCCAGACTGG 120  
 CCTCAATGGC GGA CTGACTG ACATTGACTG ACGGGGACCA GGGCTTGT TT GGGTCGAGAG 180  
 CGCCCTCATG GTGCTGGTNC TGTGTGTGT AGGTCCCCTG GGGACACAAG CAGGCGCCAA 240  
 TGGTATCTGG GCGGANTCAC AGAGTTCTTG GAATAAAGC AACCTCAGAN CAAA 294

25 SEQ ID NO:2141

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02447

30 SEQUENCE DESCRIPTION:

GTCTGGTTG GTGGATGAAC AAGTGTACG CTGGACATCT CAATGGNGTT TATTACCAAG 60  
 GTGGCACTTA CTCANANGCA TCTACTCCTA ATGGTTATGA TAATGGCATT ATTTGGGCCA 120  
 CTTGGANAAC CCGGTGGTAT TCCATGAAGA ANCCACTATG AAGATAATCC CATCAACAGA 180  
 CTCACAATTG GAGATGACAG CAACACCACC TGGGGGGAGC ANACAGGTGG AGACGTTAA 240  
 35 NGCCGTTTAN TGNGTTTCT NTTTAAAGNC TTTATCTGAC CNGGGGTANN GN 292

40 SEQ ID NO:2142

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02448

SEQUENCE DESCRIPTION:

45 GATCGGAAAA AAATCTTGA ACGCAAAGCC AAGTCTCGAC AAGTTGGAAA AGAGAAAGGC 60  
 AAATATAAAG AAGAACTTAT TGAGAAAATG CAGGAATAAA TAGAACCTGT TGTGCAACCA 120  
 CGGTTTAACC GGAGATTTTG AGGCTAGGGT GTGTTTCTTT CGAACTTTT GGAATGTCTG 180  
 GAACATTCA TTTCTGT TTGTACCTGT GCCTCTGTAA ATCTACTTTT GCAATTTTAA 240  
 GTAATAATTT TATGAATAAN AATGGGAAAT GCTTCCTAAA 280

50 SEQ ID NO:2143

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02449

SEQUENCE DESCRIPTION:

GATCCCATAA CAGGCTACCC CTTGGCCTCA TGCTGGAGTT GTGTGTGTCT GTCTTCATCC 60  
 CAGGCTGAGC TCCTTGAGGT GAGGATGTTG TGCTGTTTGC CTCCCTCACA GTGCCTTGGT 120  
 CTTAGTGGAT GCCCAGTTGT CTTGTGAATG ACTTTTAAGA AGTGACTTA AGAGAAAAAT 180  
 CCTACCNAT NNNNGTAAT TACAAGTCAT GTTTTGTNG CTTAAAGGTG ATAAATCAGT 240  
 GTATATNATN NGNTAATGTC CATTAAAGCC AGTTTTTAAA 280

SEQ ID NO:2144

SEQUENCE LENGTH:278

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02450

SEQUENCE DESCRIPTION:

GATCCTAGAG CCTGACGTTT AGTGAACCCA TGTTCCTGGG TGGGTGAAAG GGGCCCAACC 60  
 CTGCCCCACTT CAGCCCAGCC CGCCCAAGGG GACTTGTGCC AGCAGAACAT GTNGGAGGAA 120  
 GAAGCCCCGT TTCCAGGGCA TCCGCAGCCC AGGGTAGGGA GAAATATTCT CTCCACTTTG 180  
 GGGGAGAGTT CTGCTCTCG ACCTAGTGGT TTCTACTCTC ACCGACTTAT TCTGATTTC 240  
 GAAATAAAAT GAAATGTCTT ATTTTTGGGA AAGTAAA 278

SEQ ID NO:2145

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02452

SEQUENCE DESCRIPTION:

GATCCCACTG GGGCCTNTGG GAAGGNGACA GACTTATNAC TAGATGATTC GCTGGTGTCC 60  
 ATCTTTGGGA ATCGACGTCT CAAAAGGTTA TCCATGGTGG TACAGGATGG CATAGTGAAG 120  
 GCCCTGAATG TGGAACCAGA TGGCACAGGC CTCACCTGCA GCCTGGCACC CAATATCATC 180  
 TCACAGNTCT GAGGCCCTGG GCCAGATTAC TTCCTCCACC NNTCCNTATC TNACCTGCCC 240  
 AGCCCTGTGC TGGGGCCCTG CAATTGGAAT GTTGGCCAGA TTTCTGCAAT AAACACTTGT 300  
 GGTTTGCGGG TCAAA 315

SEQ ID NO:2146

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02453

SEQUENCE DESCRIPTION:

GATCCCAGGA CCATTTGGCT AGTGTGCCTA GGTGACCACA TGATTGCTGT TTTACCAGGA 60  
 ATGCAGCATC CCATTGACAA ACAAAGTGCT CTGAGAAGGT TAAAAATACT ACAGNGAATA 120  
 TGGGANCACA GNCCTTGAAA TTAGCTGAG TTGTAACAGC TGAAACTCCA AGAGGTGTCT 180

TCCTTGTTTN GAGGTGNACT AGTGTGCTT CCAGAGGGCA GCTTGAACC CGTAAAGCCT 240  
GTTTTGGGA ATCCTTTTTT GNCITGCTTT GNTTN 275

5 SEQ ID NO:2147  
SEQUENCE LENGTH:274  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS02454

## SEQUENCE DESCRIPTION:

15 GATCATCAAT GATTTATTGG CACGTTCTAT TGGGATGGTC GAAGTTAATA CAGTAGACAA 60  
ATACCAAGAT AAGGGACAAA AGTATTGTCC TAGTATCTTT TGTTAGAAGT AATAAGGATG 120  
GAACTGTTGG TGAACCTTG AAAGATTGGC GACGTCTTAA TGTTGCTATA ACCAGAGCCA 180  
AACATAAACT GATTCTTCTG GGGTGTGTGC CCTCACTAAA TTGCTATCCT CCTTTGGAGA 240  
AGCTGCTTAA TCATTAAAC TCAGAAAAAT TAAA 274

20 SEQ ID NO:2148  
SEQUENCE LENGTH:266  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02455

## SEQUENCE DESCRIPTION:

25 GATCGCAGAG AAGGCAGCTG ACATTATCAA GGGGCAGCCT GCACTCTGGG ACAAAGATGT 60  
CCCTGTCTAC AAGCCAGGA CGCTGGCCAC CCAGCGCTAA GACAGTTGCT GCTGGAGGAT 120  
GACCAGGGAA GCCCCCTGAT AAGCCAAGAG GGCCAGCACA GCCCTTGCTC CCAGGCTCCT 180  
GCCTGAAACT ATCTAGCACA CTAGGACCCA GGTGGTACCC TACTCAGTGG CTGAGAATTG 240  
GATAAAGTCT TGGGAAATGA GACAAA 266

30 SEQ ID NO:2149  
SEQUENCE LENGTH:265  
SEQUENCE TYPE:nucleic acid  
35 TOPOLOGY:linear  
CLONE:HUMGS02456

## SEQUENCE DESCRIPTION:

40 GATCTTTAAC AAATGTTTTA AGCAATTTTA AAAAGGCAGG ATGTTATTGA CATTATACAC 60  
TGAAGTCTTA ACATTTTAAC ATTTATAGTG CITATTTGCA AAATTGTATA ATTAGGAATT 120  
ATTTCAGAGA CAATGTTTTT TTTTCAGGT GAGTAGTTGC CGCGTAATAT CATTGGAGTA 180  
CATTCTTTAT ACTGTTTGTG AAATTAATAC TAGCATATTA AGTGACAAA TAGATTAGA 240  
AAACAATAAA AAATTGCATG CTAAA 265

45 SEQ ID NO:2150  
SEQUENCE LENGTH:264  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
50 CLONE:HUMGS02457  
SEQUENCE DESCRIPTION:

GATCCTAGTG TTTTAATTAC CTGTGTGCAG CTATTTTAAA TAGCATTTTA CTTGAATAAT 60  
 ATGTATGTTG TCATTGTTTC ATGCTATACT TTGTGGGATA AAAC TTGGGA ATGAGTGTGG 120  
 TAAGAAATTT ATAAAGTTT GCTTTTAAAA CGTGGACATA ACTCATTITT CTAGTTTTTG 180  
 ACAATTGTGT GTTTTAGTGT CTAGTCTGCA GAGAGCTGTG TGATTAATAA ACGTGGAATT 240  
 AACAGAATTT CCTCTCCCTG TAAA 264

SEQ ID NO:2151

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02458

SEQUENCE DESCRIPTION:

GATCCTGGGC TCATAGGCAG TCCCTTTTAC TTCCTTGTCT TGCTCCCTGC TATGCTGGAG 60  
 ATGAATGTGA CTAAAAGGGC CATCTTGCTG GCTTAATGTG TGGCTGGAGA GACCAGCCTG 120  
 GAGACAATGT GGCAAAATGG GGCCTTCAT CCAGTCTGTC TAAGCCCTGT CGACTTGGGG 180  
 AGGTGATTTT TTCTCTGTT CTATATGTNA AGCAAAATAA ATGTTTTAAA ATTAAAAGCA 240  
 NNAAGCAGA ATGTGAGTN 259

SEQ ID NO:2152

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02459

SEQUENCE DESCRIPTION:

GATCAAAGCT GGACTGGAAA TTGTATCGTG TAATTATTTT TGTGTTCTTA ATGTTATTTG 60  
 GTACTCAAGT TGTAATAAC GTCTACTACT GTTTATNCCA GTGCTACTA CCTCAGGTGT 120  
 CCTATAGATT TTCCTTCTAC CAAAGTTTAC TTTCACANTG AAATTATATT TGCTGTGTGA 180  
 CTATGATTCC TAAGATTCC AGGGCTTAAG GGCTAACTC TATTAGCACC TTAGTGTGTA 240  
 AGCAAAATGTT ACAA 255

SEQ ID NO:2153

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02461

SEQUENCE DESCRIPTION:

GATCTGTGCA GCAAAGCACC ATGGTACATG TNNTACCTAT GTAACAAACC TGCACATCCT 60  
 GCACATGTAC CCTGGAAC TT AATAAAAGTT GGAAATTTT AAAAAGAATG AATAAGACCT 120  
 GGTATTTGAT AGCACAACAG GGAGACTATA GTCAACAGCA ATTTAATTGT ATATTTTAAT 180  
 ATGACTAAAA GAGTATAATG GNTTGTGTTGT AACACAANTA AATGCTTGAG GGGATGGNCA 240  
 CCCCNAAT 248

SEQ ID NO:2154

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02462

SEQUENCE DESCRIPTION:

GATCTTAAGC TTGATAAGA GCTGTCCTGT GGCTGAGTAT GGTGTGTATG TNAAGGTGCT 60  
 TCCATCCAGG CTGGGTTTCAG AAGCCATAGC TGNGACTAAT GCAAGCTGGC CGAAGCCTTG 120  
 CTGAAAGAAG CTTTAGCTGG AGAGGCAAAG TGGCGGGAGT GGCAGGAGTG GATNNGATAA 180  
 GATGTGGTTT AAGTNATGGG TNCAGCCTGA TTCTGAGCAA TAATAAAGAN TTTCTTTTGC 240  
 CCAAA 245

SEQ ID NO:2155

SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02463

SEQUENCE DESCRIPTION:

GATCCAGGAA GCTCCCAAAC CAGAGTGTGA GAAGGCACTT CTTGCCTTTC AGGAGAGTAA 60  
 GAACCTCTGC GAANCATGGA GAACTTTATG CAACAATTAA AGGAAAGTGG CATGACAATG 120  
 GAGGAGCTAA AATATTCTCT GGAGCTGAAG AAAGCTGAGT TGAAGGCAA ATTGTTGTAA 180  
 CACTACAGCT GAGCAGATGT AATAGAAATA AACCTATGAA TAAATTTNCT TCTTGGTTCT 240  
 GAAA 244

SEQ ID NO:2156

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02464

SEQUENCE DESCRIPTION:

GATCCTATAT CTTGGTNAAT ATGCTCCCAG ATACTTTAAA CATGGCAACC TTTTGGCCTA 60  
 AGAGAATGTT TGTTTCATGGA AAAAAGCTTT TGAGATGAGA GGGTGTCTTA CTTTCTTGTG 120  
 GCAATTGATT TTCTGTTTAA ACACCCTTTG GGTAAATCT TGCAAAGAGC TTTTATAATT 180  
 NGTTTACTG AATTGTATGG AGATTGTATA CCAAGTAAAG CTCTTTTAAA TTACAAA 237

SEQ ID NO:2157

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02465

SEQUENCE DESCRIPTION:

GATCCACGCT GGGCCGAGGA TGGGACGTTT TTCTTCTTGG GCCCAGGTCCA CAGGTCCANT 60  
 GACACCCTCC CTCCAGGGTC CTCTCTTCCA CAGTGGCGGG CCCACTCAGC CCCGAGACCA 120  
 CCCAACCTCA CCCTCCTGAC CCCCATGTAA ATATTGTTCT GCTGTCTGGG ACTCCTGTCT 180  
 AGGTGCCCCCT GATGATGGGA TGCNCTTTAA ATAATAAAGA TGGTTTTGAT TAAA 234

SEQ ID NO:2158

SEQUENCE LENGTH:233



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02466

SEQUENCE DESCRIPTION:

GATCCCTAAG CTGTAGAACA TTTTAACGTT GATGCCACAA CGCAGATTGA TGCCTTGTA 60  
 ATGGAGCTTG CAGATGGAGC CCCGTGACCT CTCACCTACC CACCTGTTG CCTGCCTTCT 120  
 TGTGCGTTTC TCGGAGAAGT TCTTAGCCTG ATGAAATAAC TTGGGGCGTT GAAGAGCTGT 180  
 TTAATTTTAA ATGCCTTAGA CTGGGGATAT ATTAGAGGAA GCAGATTGTC AAA 233

SEQ ID NO:2159

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02467

SEQUENCE DESCRIPTION:

GATCTGTGCA CACTTTCTAA ACAGCTTGTN ATGCAAGTNT GAGCCTATTG TGTTACTTGA 60  
 CCTTATTTTG GAAGTTTGA ATTGGCCTAG GAGGAAACCC AGAAATGAAC CAGGGGTATG 120  
 TNATCACTTT TTTNATATCA AGTCCTCACC CTCCTNCCAC ATAATGCTCT ATCCGGCTAA 180  
 GGTTGGAAC CTGAAGTTGG AGAAGGTGGA ATAAAGTTAC ACCTGGAAA 229

SEQ ID NO:2160

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02468

SEQUENCE DESCRIPTION:

GATCCCTGCG AATTACGAAA ACTACTACAT CCATGATTGC CCCAACCCCC TTGGGGTGGG 60  
 GCAGAAGTG AAGCATCCCA ACTGACTAGA GACTCAGGCC CTGCAGGNCC TTATAGAACC 120  
 TGTGGCCATC CCTGAGCACC CTGCCACCAG GTGACCTCGG CCATACTCAC TGCCCCCCTT 180  
 GGGCACCCAC TCACCNTAGA ATAACTTAA CAGTGTCCCG TGGTAAA 227

SEQ ID NO:2161

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02469

SEQUENCE DESCRIPTION:

GATCTTACGA TGCCCTCTGT ACTGACCTGA AGGAGACCTA AGAGTCCTTT CCCTTTTGA 60  
 GTTTGAATCA TAGCCTTGAT GTGGTCTCTT GTTTTATGTC CTTGTTCTTA ATGTAAAAGT 120  
 GCTTAACTGC TTCTTGGTTG TATTGGGTAG CATTGGGATA AGATTTTAA TGGGTATTCT 180  
 TGAATTGCTT TTACAATAAA CCAATTTTAT AATCTTTAAA TTAAAA 226

SEQ ID NO:2162

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02471

SEQUENCE DESCRIPTION:

5 GATCTGCCTT GCTCACTATT TGCCTATTGG CATATATGAT TACTTTGCTA AAAGACATTT 60  
 TGGCCAAGAC AAGCCCATNT CCAGAGCTCT AAGAATGCCT AACTACAAGA AAAAGGCCAC 120  
 CTAGGCAATG GAAGCCCTCA AAGAAGTCGG AATGTCATAG TCTTGAAATG AAAGGGAAAC 180  
 TGGGAAACTG GGTTCCTCAT TAAAGTTGTT TCCCACTCTN TAAA 224

10

SEQ ID NO:2163

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS02472

SEQUENCE DESCRIPTION:

20 GATCTAATTT GATAACAAC ATGGCTTGTG TGAAGTGA GCAGGTGTTT GTTTACCCAT 60  
 AGTGTCTGT GTAGTTATTG CTTANTCTGC AGAAAATAAT GACTTAGATG AGATGTCTGA 120  
 CTTGCTTCA CTTATTAAC ATGTTACCA TGGGATGATG TCTGTAACAT CAGATATTGT 180  
 TCAACTAGAC TAGGATTAA TAAAAATTGT GAAAGCTAA A 221

SEQ ID NO:2164

SEQUENCE LENGTH:210

25

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02473

SEQUENCE DESCRIPTION:

30 GATCTTAATT TACAGTTCCA TGGGATTAAA ACAAGTTTGC ATTTATGTAA TTTGCATTAC 60  
 TTTAAAAATT ACAACAACAT AATCTCTGAA ACTTACTTCA ATCAATTCAC ATCCCTACAA 120  
 CTGTTAAGAT TTATTTTGTG ATTAGNATCT TATAGTGGGT ATTCTTTTNA GTGCTGATAT 180  
 TTCTATTCAT TAAATCCTG TGNACACAAA 210

35

SEQ ID NO:2165

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS02474

SEQUENCE DESCRIPTION:

45 GATCCTGCAT TAAATTTTAA TTTGTGAAAA TTTGAAAATT ATGAGCTATA ACTTATAAAG 60  
 TTTGCCTTCT TATGNCTAAA ATCTTTTAAA GGATTATTTG CATTTATGTA AAAGTGGAAA 120  
 TGAAGTTATA TATGAGTGCA AAGAAATTGA CTTCTGCTCA AATATGTGTT GATACCCTAC 180  
 AGTAAATTGA ATTAATTTT TATCCCAAA 209

SEQ ID NO:2166

SEQUENCE LENGTH:203

50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS02475

SEQUENCE DESCRIPTION:

5 GATCAGTCAA TTTTCCGTCG TCCGTAACCA GCGGGCCCCT GGTCAAGTNC TGGCTCTGCT 60  
 GTCCTTGCCCT TCCATTTCCT CTCTGCACCC AGAACAGTGG TGGCAACATT CATTGCCAAG 120  
 GGCCCAAAGA AAGAGCTACC TGGACCTTTT GTTTCTGTT TGACAACATG TTTAATAAAT 180  
 AAAAATGTCT TGATATCAGT AAA 203

SEQ ID NO:2167

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02476

SEQUENCE DESCRIPTION:

15 GATCTGGACT TCGAAACTTT CCTCATGGAT TCTGAATAAA AGAAACACTC TACACCTCTT 60  
 AAATCAAGGT CATGTAGATA ATGACTTTGT TATAAATGCT ACAGCTGTGA GAGCTTGTIT 120  
 CTGATTTCAT TGTTGCTTC TGTAATTCTG AAAAAGTTTA AACTGGTAGA ACTTGGAAATA 180  
 AATAATTNGT TTTAATTAAA 200

SEQ ID NO:2168

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02477

SEQUENCE DESCRIPTION:

25 GATCTTAAGT GTCTCCTTGC TCTGGTAAAA GATAGATTG TAGCTCACTT GATGATGGTG 60  
 CTGGTGAAIT GCTCTGCTCT GTCTGAGATT TTTAAAAATC AGCTTAATGA GAGTAATCTG 120  
 30 CAGACAATTG ATAATAACAT TTTGAAAATT GGAAAGATGG TATACTGITT TTAGAGGAAT 180  
 AAACGTATTT GTGGTTTAAA 200

SEQ ID NO:2169

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02478

SEQUENCE DESCRIPTION:

40 GATCCAAATC CCAGCTCTAC TGCTCGTCC GAATTAGCCT TGGGAAAATC ATTTATATGC 60  
 TAAATAATTT ACCTTTTAT CTAGGAGATG AAAAGAGGAT AATGTTTCCT TCCATAAAGA 120  
 AAGTTCTTGT AAGAATCAAA AGAAATGGTG AGCTTTAAGT GGTITGTAAA CCATAAAACA 180  
 CATCATAAAA GTTCAAA 197

SEQ ID NO:2170

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02479

## SEQUENCE DESCRIPTION:

GATCCATGNC ATCTCTCTCT TGCCTGAGGG GAAAGAGAGA TGGGCCAGGC AGAGAACAGA 60  
 ACTGGAGGCA GTCCATCTAG GGAANNNNAC TGTGAGGCCA TACTTGTGAA ACGTCTGGAC 120  
 TGCTATTCTA GAGCTTTTAT TTGNGTGTGT TCGTTGCACA NCTTGTTTTA AATGTTTAAT 180  
 AAAAGCTTTA TAAACTTTAA A 201

SEQ ID NO:2171

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02480

## SEQUENCE DESCRIPTION:

GATCCCCCAA GTACAGGCCG TAATTNTTGT GATAATTTGT AATNGTGACT TGTACTCCCC 60  
 GGCTGGCAGC GTAGTGGGGC TGCCAGGCCC CAGCTTTGTT CCCTGGTCCC CCTGAAGCCT 120  
 GCAAACGTTG TCATTGGCAG GGAAGGGTGG GGGGCAGCTG CGGTGGGGNG CTATAAAANT 180  
 GACAATTAAA CGNGACANTN GTNTTTTATT TCCTNAAA 218

SEQ ID NO:2172

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02481

## SEQUENCE DESCRIPTION:

GATCCTTGCA GGGAGCTTGG AACCTTAGTG CACCTACTTC AGTTCAGAAC ACTTAGCACC 60  
 CCACTGACTC CACTGACAAT TGAATAAAG ATGCAGGTGC TCGTATCTCG ACATTCATTC 120  
 CCACCCCNCT CTTATTTAAA TAGCTACCAA AGTACTTCTT TTTTAATAAA AAAATAAAGA 180  
 TTTTATTAG GTAAA 195

SEQ ID NO:2173

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02482

## SEQUENCE DESCRIPTION:

GATCCGGCAA CATCAACCCG AGTCATTCTG TCTGTGGAGG GACAAGTGA CTCAGGGCAG 60  
 CGCAGGCTGA CCACAGCACA GCCAACACGC ACCTGCCTCA GGACTGCGAC GAAACCGGTG 120  
 GGGCTGGTTC TGTAATTGTG TGTGATGTGA AGCCAATTCA GACAGGCAAA TAAAAGTGAC 180  
 CTTTACACT GAAA 194

SEQ ID NO:2174

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02483

## SEQUENCE DESCRIPTION:

GATCAAAATGG AAAGGAGAGG AAAGAACTCA GTGCTGCCTA TTAGTAGTTA ATTCTGTCAC 60  
TCACCACTAC ATCACTTGAG ACAAATCTAT GCCACTCAGA ATCTCCTTCT TTCCTGGACT 120  
TAACTCTAAT TCTAGAGTCT CTGTTACTGC TTGGGCTATA CCTGGGCATA CTAATAAAGT 180  
ATGGTATTGA AA 192

SEQ ID NO:2175  
SEQUENCE LENGTH:192  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02484

SEQUENCE DESCRIPTION:  
GATCAGAACT GTTACAAAA AACAACTGTC AGTTTTATTG AGATGGGAAA AATGTAAACT 60  
CGANNNTTAT TACTTAAGAC TTTATGGGAG AGATTAGACA CTGGAGGTTT TTAACAGAAC 120  
GTGTATTAT TAATGTTCAA AACACTGGAA TTACAAATGA GAAGAGTCTA CAATAAATTA 180  
AGATTTTGA AA 192

SEQ ID NO:2176  
SEQUENCE LENGTH:187  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02486

SEQUENCE DESCRIPTION:  
GATCGTCTTG GAAGGGAGTG GTTTCAGAG ACATTCAGA AAGTGAAGGA GAAACTCAAG 60  
ATTGACTCAT GAGGACCTGA AGGGTGACAT CCCAGGAGGG GCCTCTGAAA TTCCACAC 120  
CCCAGCGCCT GTNCTGAGGA CTCCTCCAT GTGCCCCAG GTGCCACCA TAAAAATCCT 180  
ACAGAAA 187

SEQ ID NO:2177  
SEQUENCE LENGTH:187  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02487

SEQUENCE DESCRIPTION:  
GATCATTGAA ATGCTGAAAA TTTTAACAGT CTTCTAAAA GTATTGAGGG GGCAAAAATT 60  
ACCAATTATG GTATACAAAA ATAAGCCTAT AAATGTNTT CACATTGCTA ACTTGAGTTT 120  
CAGTTGATTC AGTTTGTAAT AACTAGTAAT GAGCTTCTGT TTACAATAA AATNCTGTAA 180  
ATTGAAA 187

SEQ ID NO:2178  
SEQUENCE LENGTH:186  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02488

SEQUENCE DESCRIPTION:  
GATCAGTTGC TTATAGATAA TGTTCATGA CCTCAAGACA TATATTTTG AGAAATTATC 60

ATTTTAAAAA ATTTGGTCTA TACTGATTGT TTTCAGTGAT TCCAATATTA TTACTTATAA 120  
 CACTGACCTC TGGAAAATAT TTTGTNCACA AGAAATAATA AAGTATAATG ATTTGTNGCA 180  
 NNNAAA 186

SEQ ID NO:2179

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02489

SEQUENCE DESCRIPTION:

GATCCACAAG GCCTGAGGAG CAGTGTGGGG GGACAGACAG GAGGTGGATT TGGAGACCGA 60  
 AGACTGGGAT GCCTGTCTTG AGTAGACTTG GACCCAAAAA ATCATCTCAC CTTGAGCCCA 120  
 CCCCCACCNC NTTGTCTAAT CTGTAGAAGC TAATAAATAA TCATCCNTNC TTGCCTAAA 179

SEQ ID NO:2180

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02490

SEQUENCE DESCRIPTION:

GATCCAATGG AGCCTGGNGA GGTGTGCCCA GAAAGCTTGT CTGTAGCGGG TTTTNTGAGA 60  
 GTNAACACTT TCCACTTTTT GACACCTTAT CCTGATGTAT GGTTCAGGA TTTGGATTTT 120  
 AATTTTCCAA ATGTAGCTTG AAATTCAAT AAACCTTGCT CTGTTTTTCT AAAAATAAA 179

SEQ ID NO:2181

SEQUENCE LENGTH:177

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02491

SEQUENCE DESCRIPTION:

GATCTGTCCA CTCCTGGTCA TTGGTGGATG TTAACCCAT ATTCCTTTCA ACTGCTGCCT 60  
 GCTAGGGAAA ACTGCTCCTC ATTATCATCA CTATTATTGC TCACCACTGT ATCCCTCTA 120  
 CTGGGCAAGT GCTTGTCAAG TTCTAGTTGT TCAATAAATT TGTTAATAAT GCTGAAA 177

SEQ ID NO:2182

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02493

SEQUENCE DESCRIPTION:

GATCAAAAAA CCACAGGGCT TTTGGGCACT GCCTCCTTGG GAAAGTAGTG GCCACAGAAG 60  
 AGAGATGAAA CCTGTAAGAA GTCTGGAGTC TTTTGGAATC TCAGCCATTT CCCCAGGTTG 120  
 TTACTTTCTT AGTATGTACA GTCTTCTCAG GATGAGCAGT AAAACCTTTG AACAAA 176

SEQ ID NO:2183

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02494

SEQUENCE DESCRIPTION:

GATCCTAAAC TCTTAGCTT AAGTGAAAT GAAGTACAGT AGTTCCCTA CTGAACCCTA 60  
CCTCTTGTGT CCTGGAACC TTCTAGAACA CTGCCTTCT ACCCTCTGGT TGGGAGATGC 120  
AGCCACCACA TCCCTTCATA TCATACTGTT TTGAATAAAT TTTCAAATCC TTAAT 175

SEQ ID NO:2184

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02495

SEQUENCE DESCRIPTION:

GATCCGGAGG GCCCAGGAGA ACCGGAGCGT GCTTCAGGGT GCCCGCAGAA CAGGAGCTGC 60  
TCAGCCAAGA ACTGTGGCGG CGGCTGCTGC CAGGATGCCG AAGATACCCC ACTAGCACCC 120  
CTNAGGGGGT CATGTGGTCA ATAAAAGTCC TTAGCTGCTG CCTAAA 166

SEQ ID NO:2185

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02496

SEQUENCE DESCRIPTION:

GATCAAAATC AAGAAATCCG GGCATCACAG AGAAGTTGGG TTAGGACAG CAGGTGCTGT 60  
TCCGAGACTC AGTCTAAAG GGTTTTTTTT CCCACTAAGC AAGGGGCCCT GACCTCGGGA 120  
TGAGATAACA AATTGTAATA AAGTAAC TTC TTTTCTTC TAAA 164

SEQ ID NO:2186

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02497

SEQUENCE DESCRIPTION:

GATCAGCCCC TTAATATNAG TTCTAGAGCA GGTCTTCTGT TCCAGAAGGG GAGAAGCATA 60  
GAGGGCCTGT GAGCTCACGT GTGTTCTTTG TCATAGGGGT GAAAACTAA CTTCAAGTGT 120  
CCCTTGTTTG AAATAAATT AGCAGAGTCA CTTTCTATCT TAAA 164

SEQ ID NO:2187

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02498

SEQUENCE DESCRIPTION:

GATCTAATGG TTTTATAAAT NAAAGTTCCC CTGGACAAGT TCTCTGCCT GCCACCATGT 60  
AAGATGTACC TTGCTACTC ATTCACCTTC TGTATGATG GTGAGGCCTT CCCAGCAATG 120  
TGGAAGTGTG AGTCCATTAA ACCTCTTTCC TTTATAAATT AAA 163

SEQ ID NO:2188

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02499

SEQUENCE DESCRIPTION:

GATCCTAACC AGGTAACCTG GTCCTNTGAA TTGAAGCTTA TCATATACCC AAAGCCTTGA 60  
CTAGAAATAC CTAATAGAA TACCATGGTC ATTGGAAAAA ATAGATAGTN TTNTAAAGTA 120  
TTATTNAAT AAATCCTAAA GTNTGTCTNT CTTCTCCTCA AA 162

SEQ ID NO:2189

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02500

SEQUENCE DESCRIPTION:

GATCCTGGCC ATGAATGAAA AGGATAAGAA GAAAGAGAAG AAATGAAGTG ACCATCCAGC 60  
CTTTCCCAAT NAGACTTCCT CTCCTCCAC CCCTCATTTC CTTTTGCAC ACATTACAGG 120  
TGGTGTGTTT TGTGATAATG AAAAGCATCA GAAA 154

SEQ ID NO:2190

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02501

SEQUENCE DESCRIPTION:

GATCAAAGCC AGCNACCCCC ACCCCAACAC ACTCGGTGTC CCANTCATAC TAGGGCCTGT 60  
GTAAATCCCA GCCTGGCCAT ACCCTCAACC TCAGTGGGCT GGAAATNACA GTGGGCCCTA 120  
TAGCAGTGGC AGAATAAACT CAGNTGTGTT CAAA 154

SEQ ID NO:2191

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02502

SEQUENCE DESCRIPTION:

GATCGCCCCA CTGCAATCCA GCCTGGGAGA CATAATTCAA ATCTATTTTG GTCTTATATC 60  
TTCTTATGTT TGIGTTATTT CATGTGTGCC AGTTTCTCTT TTTTTCACAA CAATTTATCA 120  
ATTTGTGGCA ATAAAAATNA TTTACCTTTT AAA 153

SEQ ID NO:2192



SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02503

SEQUENCE DESCRIPTION:

GATCATGGTG ATTTTACTGC TGCTTGTGGC TATCGTGGTT GTTGCACTCT GGCCGACCAC 60

CAGCAGTNAC ACCTGCCAAT NACAGATGCA AGCCCAACAC CCTTTGGTA CGCAAAACCT 120

GCTCTCAATA AATCCCCCA AAGCTCTGAA A 151

SEQ ID NO:2193

SEQUENCE LENGTH:371

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02504

SEQUENCE DESCRIPTION:

GATCCCAGGA ACCTTCCTNC TCCAGGGCAG CACAGGACTC AGCCATGTNT GGACCGGCCC 60

TGCTGAGGCT ACAGTCACTC TGGAAGCTCT GCGCTTCATC AGGNGGCAGG ACTGTGGCGG 120

GAGGGGTCTT TGAAGATGGG TGTGGGGAGC AGTGGGTCAG GAAGTGGGAG CCAGAGGTTT 180

GACTCACTTT GCTTTATTTT TCAGGCTACA ATACAGGTCA GAGACAATGG CTTATAAAGG 240

TTTAGTGTGG TCTCAGGATG TGACAGGCAG TCCAGCCTGA CCTTTCTGCA CACTCCAGAC 300

AAACTTCCCA GACAAGCTCC TTTGTGCCTC TACGTGGAGA GGGTGTGGGA AAGTTATCAC 360

ATTAAAAGGT N 371

SEQ ID NO:2194

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02505

SEQUENCE DESCRIPTION:

GATCAAGAAA GAGATGGAGG AGGAGGACTG AGCCCAGAAT TCACTAGGTT CGAATCCAGA 60

NAGCAGTGTG GAAAAAAAAA ACCAAAAANC AACTGNCCAG TTGTTGATAA CCACTAAGAG 120

TCTCTATTAA AATTACTGAT GCAGAAA 147

SEQ ID NO:2195

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02506

SEQUENCE DESCRIPTION:

GATCTGTGTC ATTNCCCATG AGGGGCCGGG GCAGGTGGCT GGGTGGGGGC ACAGGCTGGA 60

GTATTCTNAG TTCTACTGGT TCTACACTGT GAGGTGGCAA TGGGATTGTC TCAGATGCCA 120

CCCAATAAAA TGCCTGTAAC TTAAA 145

SEQ ID NO:2196

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02507

5 SEQUENCE DESCRIPTION:

GATCGCTACT CTTAAGAATA TACATGTATG TATTCATAGG AACATTTTT CTCAATATTT 60

GTATGATTCTG CTTACTGTTA TTGTGCTGAG TGAGCTCCTG TGTGCTTCAG AAAAAAATAA 120

ATGAGACTTT GTGTTTACGT TAAA 144

10

SEQ ID NO:2197

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS02508

SEQUENCE DESCRIPTION:

GATCAGCTGG AAGCTCACTA GTCATCTCCT GCCCAATCCC CAGAAACCCT GATTCAGGTC 60

TGCAGGGCTCC TCGGGGCTCA CCACGGCTGC TGGCTCCGGT ACCATGTAAN NCCTAGGAAG 120

GTAAAGGNGC AGGCAACCTC AAA 143

20

SEQ ID NO:2198

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS02509

SEQUENCE DESCRIPTION:

GATCCAGTGA GATAGAATAC ATGTAAGTNT GGTTTTGTA TTTAAAAAGT GCTATACTAA 60

30

GGGAAAGAAT TGAGGAATTA ACTGCATACG TTTGGTGTT GCTTTTCAA TGTGTGAAA 120

TAAAAAAAT GTTANGANA A 141

SEQ ID NO:2199

SEQUENCE LENGTH:137

35

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02510

SEQUENCE DESCRIPTION:

40

GATCCCTTGT GGCTATGCAG ATACCTACCT CACAGAGTTG TTGTAGAAGA CTGGTGGTTT 60

GGTTCAAACC TTGTGATTAA AGAGTTTGTG AAGCATTTTA TTCTTTTGAA TAAAAGCAAC 120

ATATCNAAAA CATTAAA 137

SEQ ID NO:2200

45

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02511

50

SEQUENCE DESCRIPTION:

GATCCCTGTT TAATCCAAA TTACAGTCGG ACTTGGATAC ATCATTTGTA ACATTGTAGG 60

55

AAAGAAAAA GTCTTGTTN TGA AAAACGA TTTGCATTG GGTAAAAATA AGTGACCATG 120  
CTTTTGTCT GTAAA 135

5 SEQ ID NO:2201  
SEQUENCE LENGTH:135  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02512

10 SEQUENCE DESCRIPTION:  
GATCCAGCTC AAGTGCCATC CTGCCAGTGG CCCCAGACT GTGGGGTTGG GACGCCTGGC 60  
CTCTGTGTCC TAGAAGGGAC CCTCCTGTGG TCTTTGTCTT GATTTTNCCT AATAAACGGT 120  
GCTATCCCCG CCAAA 135

15 SEQ ID NO:2202  
SEQUENCE LENGTH:133  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS02513

SEQUENCE DESCRIPTION:  
GATCACTACT GCTCTGGAG TTCCTTCTCC TAAAGCTAAG GCCAGCCTCC ATCACAAATG 60  
CCCATAAAAT CTGGCTCGTC TTTGATGAAC AATAAATATT TTTGAACAA ATAAATAACT 120  
25 GCCCTGCATT AAA 133

SEQ ID NO:2203  
SEQUENCE LENGTH:138  
SEQUENCE TYPE:nucleic acid  
30 TOPOLOGY:linear  
CLONE:HUMGS02514

SEQUENCE DESCRIPTION:  
GATCCTCCCG CTGGCTTCCA GACAGACCTG GGATTTTGGC AGTCATGCCG GGTGATGGTG 60  
35 TTCCTGCGGA GACCCTCAGT TGTCTATT CTTCTAGCT TCCCTGCAAT AAAATCAAGC 120  
TGCTTTTGTG GGAATAAA 138

SEQ ID NO:2204  
SEQUENCE LENGTH:130  
40 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02515

SEQUENCE DESCRIPTION:  
GATCATTCA CTTGATGTTT TTAAAGCATC CTAAGTACAG TAGAGTAGAA AACTNATTC 60  
45 TTTGTAAATT GTAACTGAA TAATGCCTTT AAAAAATCAA AATAAAATTA ACAAATAATG 120  
GTGAATGAAA 130

50 SEQ ID NO:2205  
SEQUENCE LENGTH:176

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02516

SEQUENCE DESCRIPTION:

GATCTCCTAT GTTACCAATG TGTATCGTCT CTTTCTCCCT AAAGTGTACT TAATCTTTGC 60  
TTTCTTTGCA CAATGTCTTT GGTGCAAGT CATAAGCCTG AGGCAAATAA AATTCCAGTA 120  
ATTCGAAGA ATGTGGTGTG GGTGCTTTCC TAATAAGAA ATAATTTAGC TTGAAA 176

SEQ ID NO:2206

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02517

SEQUENCE DESCRIPTION:

GATCATGTTA TGAATTTGTA ACATTCACAC AACACCTCAC TTTTNAATCT ATAAAAGAAT 60  
TGCACGTATG ANAACCTAT ATTNAATAC TGCTGAAACA GACATGAAAT AAAGAATTTA 120  
AAGAATGAAA 130

SEQ ID NO:2207

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02518

SEQUENCE DESCRIPTION:

GATCTAGCTT CTGGCTCTGT GTGTTATTG ACCAGTGGTG TGCCTTGAGA AACCAGAACT 60  
CTCTGAATTT CAGTTTTGTC TCTNTNTAAA TGAAGAAGGT TGTAATAAAA AAAATCTCAA 120  
GTTTCAAA 128

SEQ ID NO:2208

SEQUENCE LENGTH:349

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02519

SEQUENCE DESCRIPTION:

GATCCGTCAT GGNCAACGAG AAGCACAGCA AGAACATCAC CCAGCGCGGC ATACGTGCGC 60  
AAGACCTCGA GAAATGCCCC CGAAGAGAAG GCGTCTGTAG GCCCTGGTTA TTGGCTCTCT 120  
TCACTTTTGT NGTCTGTGGT TCTGCAATTT TCCAGATTAT TCAAAGTATC AGGATGGGCA 180  
NNTGAAGTGA CTGACCTTAA NTGTTTCCAT TCTNCTNTGA ATTAACTTA ACTCATTCT 240  
GATGTTTGAN CCCTGGTTNA ACAATTCAGT AAANATCTGC TAGAATNCTT NCTATCATNT 300  
TCATGTGCAT TCAAGNTTCT CATNGCATCC ANGTTCTAGN CAACACAGN 349

SEQ ID NO:2209

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02520

SEQUENCE DESCRIPTION:

GATCACCAGG CAGCGACCTC CGCNCACCCC AGCAGTCGCG AGCCTCGGCC CAGCCANAGG 60  
 AAGCGNTGCC GNCGGACCTG ACTGACTTCC CAGTGGAAC TGCCTTCTTG GCTGGGACAG 120  
 CCNTTTN 127

SEQ ID NO:2210

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02521

SEQUENCE DESCRIPTION:

GATCTGGGCC ACTTCCTCC TTCCAGTCAT GAGTAATCAT CAAGGAGCAA GTTGGAGTGT 60  
 TTCAGGTGTA TATTTGTAG AACCCAAAAG ATTGGAGCCT TAACAATAAA CATCAGCACT 120  
 AAGAAA 126

SEQ ID NO:2211

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02522

SEQUENCE DESCRIPTION:

GATCTTTCAT AAAGCAGAAT GGTACGTATC GGATTGTTTT AATGTTATAT ATTGGATTGT 60  
 ATTCGTTGTT ACAAACCAA TATTCTATGG AGAATGAAAA AAATAAAGGA CTAAATTAAAC 120  
 TGGAAA 126

SEQ ID NO:2212

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02523

SEQUENCE DESCRIPTION:

GATCTCGCAA AGTTATTCTT CCACCATGGC CAACAACGAA GGAATTTTCT CCCTGGTGGC 60  
 GAGGAAGCTG AGCAGACCCC TGTGATGCCT GTNACCTCAA TNAAGCAAT TCCTTGACC 120  
 TGTCAA 127

SEQ ID NO:2213

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02524

SEQUENCE DESCRIPTION:

GATCAATGTA CTTTTATAA ACTTGCCATA GATATCTCAG ATTTGAAACC TCAAGACAGA 60  
 TTTATTATC TTAAATGCTG TATGATAATG AAGAAAAATA AAAATTATT TCTTGCAAAG 120  
 TTA 125

SEQ ID NO:2214  
SEQUENCE LENGTH:121  
SEQUENCE TYPE:nucleic acid  
5 TOPOLOGY:linear  
CLONE:HUMGS02525  
SEQUENCE DESCRIPTION:  
GATCAGTTTG GAGAGTAGGG GGCCACTCAT ATTCTGGGCT CCTGGAACCA ATCCCGTGAA 60  
10 AGAATTATTT TTGTGTTTCT AAAACTATGG TTCCAATAA AAGTGACTCT CAGCGAGCAA 120  
A 121

SEQ ID NO:2215  
SEQUENCE LENGTH:124  
15 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02526  
SEQUENCE DESCRIPTION:  
GATCCCCGCA TGGTGTGGG GGTGCTGGTG TGTCTGGTG CCTGGACTTG AGTCTCACCC 60  
20 TACAGATGAG AGGTGGCTGA GGCACCAGGG CTAAGCAATT AAACCAGTTA AGTCTCCAG 120  
GAAA 124

SEQ ID NO:2216  
25 SEQUENCE LENGTH:120  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02527  
30 SEQUENCE DESCRIPTION:  
GATCAAAAAG GGGTCTGAGG TTGCATCAGG GAGACAACTG TAATGATATA AGCAATAGTT 60  
GAGAACTGA CAGCAAGTAA TAAGACAGGA AGAATAAAAC TAGAAGAAGT CAGAATGAAA 120

SEQ ID NO:2217  
35 SEQUENCE LENGTH:120  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02528  
40 SEQUENCE DESCRIPTION:  
GATCTGAGTT CTGAGCAAGT CAGACTCCTT CCTTTTGCC TCCAAAGCCA CAGATGTTGG 60  
CGGGCCACC TGTTAACTC TGTATTATT TCCAATAAA GAAGGGCTTC CAAAGGCAAA 120

SEQ ID NO:2218  
45 SEQUENCE LENGTH:120  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02529  
50 SEQUENCE DESCRIPTION:

GATCGGAAGT GTAAAGCTAT AATCCCCAGA ATTAAAGTTT TTATTATTTT TTATACATTG 60  
TAAACATAG ACGTTTATTT ATGTGATTAA NTTCTATTAA AATTACATG CTAAANTAAA 120

5

SEQ ID NO:2219  
SEQUENCE LENGTH:115  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10

CLONE:HUMGS02531  
SEQUENCE DESCRIPTION:  
GATCCAGTTT TTCTTGGGAG GTTGATCTG GTCATAAGGT AAACATTCTA TATATTCTAT 60  
GCCTGCTCTA GAATTGAAAG ACTTCAGCAG TATTAAAGCA TTTTAAATC TTAAA 115

15

SEQ ID NO:2220  
SEQUENCE LENGTH:122  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20

CLONE:HUMGS02532  
SEQUENCE DESCRIPTION:  
GATCTGTATT TGTATATGCT GATGCAATGA TAAAAATCAC TGTAATAGNT TCATTGTGTT 60  
GTACTGGATG CAAAGCTAGA AAATATTGCA ATANNTGAGA CCGATGAAAG ACTTCTCTGA 120  
AA 122

25

SEQ ID NO:2221  
SEQUENCE LENGTH:110  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

30

CLONE:HUMGS02534  
SEQUENCE DESCRIPTION:  
GATCTTGGGC AAGTTAATCT CTGGGAACCT TGGGTTTCTT ATCCTCAAAA AAGGCGATGG 60  
AAGGNCCTGG NCNCGTGATT AAATAAAGC AACGCAAGAA AAATGCCAAA 110

35

SEQ ID NO:2222  
SEQUENCE LENGTH:109  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

40

CLONE:HUMGS02535  
SEQUENCE DESCRIPTION:  
GATCGATGGT ACTTTTGGAA AATGCTTTAT TGCAAAAAAG TGGCTAGGGT TTTACAAGGN 60  
CTATGAAGAA ACATATTAAG GTTAATAAAG CTTTTTATTG AGTGTTAAA 109

45

SEQ ID NO:2223  
SEQUENCE LENGTH:105  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

50

CLONE:HUMGS02537

55

## SEQUENCE DESCRIPTION:

GATCCTCCCT TAGAGCATTT GGAAGAGTGT GGCCCTGCCA ACACCTTGAC TTCAAAC TTC 60  
TGGCCTCCAT AACTATGAAA TAAATNCTTG TTGTTTAAAG CCAAA 105

SEQ ID NO:2224

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02538

## SEQUENCE DESCRIPTION:

GATCTGTCCA CTTCTGGTGT CAAAGATTTT ACTCATCTTC TTAGTACATT CTATGTATTT 60  
NATATGTATA ATTTTATACA ATTAATAATA GATTTTNGTC TAGTGAAA 108

SEQ ID NO:2225

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02540

## SEQUENCE DESCRIPTION:

GATCTTATAT CATTACAGTA GCCTTTTTGT AGAATCCATC CTATTTTCCA CATGGATAAT 60  
CATGTCAATGA AGAATAAAGA CAGTTTACT TCTTTCCTTA AA 102

SEQ ID NO:2226

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02542

## SEQUENCE DESCRIPTION:

GATCCCAGGG GAGGGGTCTC TCCTCCCACC CCAAGNCATC AAGCCCTTCT CCCTGCACTC 60  
AATAAACCCCT CAATAAATAT TCTCATTGGT CAATCAGAAA 100

SEQ ID NO:2227

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02543

## SEQUENCE DESCRIPTION:

GATCTGCTGC TTCCAAGTTG TGTGACCTTG GCTAAGTCAC TTAACCTTTC TGATTGTCAT 60  
TTGCTTTTTT AATAAAGTGG GTCTGGTGAA CAAGAAA 97

SEQ ID NO:2228

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02544



## SEQUENCE DESCRIPTION:

GATCCCACTG TATGGCTATA CGGTATTTTA TCAGTGCATC CACTGTCGGG TTTTCCCCT 60  
 TGTGGACTAT TATGAATAGT GGACGCTTGT GTGCAAA 97

5

SEQ ID NO:2229

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS02545

SEQUENCE DESCRIPTION:

GATCAGGTGA GCTGTGTCCA GAAAACCAAC GAGAAGGAGT GGAAGGAGGA ATGAACGTTT 60  
 CATTCTCGTT AATAAAGGCA TTATCCTAAT TAAA 94

15

SEQ ID NO:2230

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS02546

SEQUENCE DESCRIPTION:

GATCTAATCT ATCTCTGGGG CCATAACTCA TGGGAAAACA GAATTATCCC CTAGGACTCC 60  
 TTTCTAAGCC CCTAATAAAA TGTCTGAGGG TGTCTCATGA AA 102

25

SEQ ID NO:2231

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS02547

SEQUENCE DESCRIPTION:

GATCATATAT TTGTGGCATA CAGTGTGATG TTTTGACATG NATATAATTT TGTATACAAT 60  
 GTGGAATGAT TAAAACAAGC TAATTAACAT AAA 93

35

SEQ ID NO:2232

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS02548

SEQUENCE DESCRIPTION:

GATCTGCACT TCCTCCCTT TCACCTACCT GTACACCTAA CCTGGCCTTA GACTGAGCTT 60  
 TATTTAAGAA TAAATCGTG GTGGTGGTCA AA 92

45

SEQ ID NO:2233

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS02549

55

## SEQUENCE DESCRIPTION:

GATCAGTGGC TGCTGGGTGG CGGGTACCCT TNCTCAGATG CCTGGCAGGN CTGGNTGGCG 60  
 ATTCATAAAG ACCTCGTGTT GATTCCCAA A 91

5  
 SEQ ID NO:2234

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

10  
 TOPOLOGY:linear

CLONE:HUMGS02551

## SEQUENCE DESCRIPTION:

GATCTAACCC CTTACCCATC TNTCTACTGC TGGACTGTGG AGGGTCACCA GGTTGGGAAC 60  
 ATGCTGGAAA TAAACAGCT GCAACCAAA 89

15  
 SEQ ID NO:2235

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

20  
 TOPOLOGY:linear

CLONE:HUMGS02552

## SEQUENCE DESCRIPTION:

GATCTTTTGG AGAGAAACAA ATGAGGATTG TAAAGTTTGG GGACTTACCT CTGTAGCATT 60  
 GTGAAATAA ACTTTGATTA AGCTGAAA 88

25  
 SEQ ID NO:2236

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

30  
 TOPOLOGY:linear

CLONE:HUMGS02553

## SEQUENCE DESCRIPTION:

GATCACCCTG GCGTCTGTTT TGTATGCTCT TTACCTATGG ACTAGTTTGT GGACGGCTAA 60  
 GAAATACAGC CTCAGCATTG ATTTGAAA 88

35  
 SEQ ID NO:2237

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

40  
 TOPOLOGY:linear

CLONE:HUMGS02554

## SEQUENCE DESCRIPTION:

GATCTTAAGG AGTGTAATTT GCAATCTAAT TTTATCCTCT TACTCTGTGT TGTTAAACCA 60  
 TATACAATAA ACGGTGTTTA TGGAGAAA 88

45  
 SEQ ID NO:2238

SEQUENCE LENGTH:96

SEQUENCE TYPE:nucleic acid

50  
 TOPOLOGY:linear

CLONE:HUMGS02555

SEQUENCE DESCRIPTION:

GATCTGGCTG TGAGGCCCTC AGGGCAGGGA TACAAAGCGG GGAGAGGGTA CACAATGGGT 60  
ATCTAATAAA TACTTAAGAG GTGGAATTG TGGAAA 96

SEQ ID NO:2239

SEQUENCE LENGTH:86

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02556

SEQUENCE DESCRIPTION:

GATCCGGGGA CCAGGGGCTG ACCTCCATTC GTACCCCACT GCTTTGGAGN TGATGGGACT 60  
ATCAATAAGA ACTCTGTTCA CGCAA 86

SEQ ID NO:2240

SEQUENCE LENGTH:90

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02557

SEQUENCE DESCRIPTION:

GATCAAACCA TTTNACCTGG AGTTTGGTAC TGGTTTAAAC TTCTCTNAAT CTGTATAAGA 60  
AAAATGAAGA CAATTGAACT TTCAAACAAA 90

SEQ ID NO:2241

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02559

SEQUENCE DESCRIPTION:

GATCCAAGTT TTGCGGGGTC TAAAGCTGTG TGTGTTGAGG GGGATACTAA GTTTATGAAA 60  
AAGAATAAAA AACACAACCA CGAAA 85

SEQ ID NO:2242

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02560

SEQUENCE DESCRIPTION:

GATCTCGCCA CTNTTCTCCA ACCTGGGCAA TAAAGCAAGA NCCTGTCTTC AAACAAGCAA 60  
ATAAAAACCT CTTATCCTG CAAA 84

SEQ ID NO:2243

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02562

## SEQUENCE DESCRIPTION:

GATCCTGTTA GCTTTCTGAA TGTTCGTGG TTGAATGTGT TTTTGCTTAA ATAAAGCTTT 60  
TGGTATTTGT TTAAATTAAA 80

5

SEQ ID NO:2244

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS02563

SEQUENCE DESCRIPTION:

GATCCCAACC GTTTGGCACA GCTTTGGCCA CAGCCAGGCC CCTCTGGAAT TGCCTTATT 60  
AAACCAGTTT CCCGAGAAA 79

15

SEQ ID NO:2245

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS02564

SEQUENCE DESCRIPTION:

GATCCGGGTC AATGCTTCGT TTTCTAAAGG ATGCTGCTGT TGAAGCTTTG AATTTTACAA 60  
TAAACTTTTT GAAACAAA 78

25

SEQ ID NO:2246

SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS02565

SEQUENCE DESCRIPTION:

GATCTTGGTT TTCCATGAAT ACAGCATGTA TAATAAAAAT TTTAAGAAAT AAATGTTATT 60  
CTACTTTATT AACAAA 76

35

SEQ ID NO:2247

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS02567

SEQUENCE DESCRIPTION:

GATCTTCTGC CGGGCGTGCC CCAGAGGACA GTGGGTGGAG TGGTCCTACT TATTAAATGT 60  
CTCAGCCCCT CAAA 74

45

SEQ ID NO:2248

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS02568

55

## SEQUENCE DESCRIPTION:

GATCTCACCT TTGCAAAGTT GGATAGTCAA TTTGTTTTTA GAGGAAATAA AACACTTATT 60  
CTGTGATTTT AAA 73

5  
SEQ ID NO:2249

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

10  
TOPOLOGY:linear

CLONE:HUMGS02569

## SEQUENCE DESCRIPTION:

GATCTGGAGA GAAAAACATT CAAACCATTG CATCATACAA AAAAAAGGCT ATTAATAAATT 60  
GGATTATAGC AAA 73

15  
SEQ ID NO:2250

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

20  
TOPOLOGY:linear

CLONE:HUMGS02570

## SEQUENCE DESCRIPTION:

GATCAGAGTA AGAATGTCTT AAGAAGAGGT TTGTAAGGTC TTCATAACAA AGTGGTGTTT 60  
GTTATTTACA AA 72

25  
SEQ ID NO:2251

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

30  
TOPOLOGY:linear

CLONE:HUMGS02571

## SEQUENCE DESCRIPTION:

GATCAAATCT GTACAGTTTC TATTGTTCCA GATTTTTTTA AGTTTGTATT AAAAGCATGA 60  
TACATAATAG TAAA 74

35  
SEQ ID NO:2252

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

40  
TOPOLOGY:linear

CLONE:HUMGS02572

## SEQUENCE DESCRIPTION:

GATCTTTTCA GTGTTTTTTC ACTTTAGCTA TGTGGATTAG CTAGAATGCA CACCAAAAAA 60  
ATACTTGAGC N 71

45  
SEQ ID NO:2253

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

50  
TOPOLOGY:linear

CLONE:HUMGS02573

## SEQUENCE DESCRIPTION:

GATCCAGGAG GGAGCCACCC CCAAGGACCC TGCCAGCCAC AGACCTCCAA TAAAGACAGC 60  
 ATGGAAACAA A 71

5  
 SEQ ID NO:2254

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

10  
 TOPOLOGY:linear

CLONE:HUMGS02574

SEQUENCE DESCRIPTION:

GATCTGATGT GAATTCAGAT TTCCAATCTT CTCCTAGCCA ACCATTTTCC TGGAAATNAAA 60  
 AATTCAGTAA A 71

15  
 SEQ ID NO:2255

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

20  
 TOPOLOGY:linear

CLONE:HUMGS02575

SEQUENCE DESCRIPTION:

GATCCAGAAG TTCTAAATCC AGGATTTTAA TTAGTAACTC AAATAAAATG CCACACATTT 60  
 TCATACAAA 69

25  
 SEQ ID NO:2256

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

30  
 TOPOLOGY:linear

CLONE:HUMGS02576

SEQUENCE DESCRIPTION:

GATCATAGTA GTGCCGCTGT TGAGTGATAA AGCAACTTGT CATTAAAGAT GTGTGTNCAG 60  
 ACATGGAAA 69

35  
 SEQ ID NO:2257

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

40  
 TOPOLOGY:linear

CLONE:HUMGS02577

SEQUENCE DESCRIPTION:

GATCCCAGCC CAAATNNGCC CATTACACA ATCAGGAGCN AAATAAATTA CTGTTGTCTT 60  
 AACACTAAA 69

45  
 SEQ ID NO:2258

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

50  
 TOPOLOGY:linear

CLONE:HUMGS02578

SEQUENCE DESCRIPTION:

GATCTTCAGC TGTTTGCCCG TNCTTATTAC ATAAACTGAA AACAGGATAA AAACGGAGTG 60  
CAATGAAA 68

5

SEQ ID NO:2259  
SEQUENCE LENGTH:63  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

10

CLONE:HUMGS02580  
SEQUENCE DESCRIPTION:  
GATCTGTCAA AGATATGAAC ATGAAAGAAC AGCTTATTC AATAAACCCA CTTTACATAC 60  
AAA 63

15

SEQ ID NO:2260  
SEQUENCE LENGTH:63  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

20

CLONE:HUMGS02581  
SEQUENCE DESCRIPTION:  
GATCAAAAGT AAATGTTCTC TTTGCCATT TAGATGGAAA AATAAAAAA ATTAAAAAGT 60  
AAA 63

25

SEQ ID NO:2261  
SEQUENCE LENGTH:86  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

30

CLONE:HUMGS02582  
SEQUENCE DESCRIPTION:  
GATCTACATG AAGGAACTGT AGATGATGTA TTTTTTTCAT CTTTTTGTG AACTGATTG 60  
CAATAAAAT GATACTGATG GTGAAA 86

35

SEQ ID NO:2262  
SEQUENCE LENGTH:60  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

40

CLONE:HUMGS02583  
SEQUENCE DESCRIPTION:  
GATCCCTTTT TATTTTGTG GTTTTTTAAT ATAGTATAAA AATCCTTTTA AAAAAACAAA 60

45

SEQ ID NO:2263  
SEQUENCE LENGTH:67  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

50

CLONE:HUMGS02585  
SEQUENCE DESCRIPTION:

55

GATCAAAACA GGATTCCATT GACCTAATTA TATTAAGCTA ATAAACTAAT TTTTGAATT 60  
TTTGAAA 67

5 SEQ ID NO:2264  
SEQUENCE LENGTH:58  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02586  
10 SEQUENCE DESCRIPTION:  
GATCAATATT TATTGACTTG TAGTAACTGC CACCAATAAA GCAGTCTTTA CCATGAAA 58

15 SEQ ID NO:2265  
SEQUENCE LENGTH:55  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02588  
20 SEQUENCE DESCRIPTION:  
GATCAATAGA CTGTACTTAT TTTCCAATAA AATTTTCAAA CTTTGTACTG TTAAG 55

25 SEQ ID NO:2266  
SEQUENCE LENGTH:53  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02589  
30 SEQUENCE DESCRIPTION:  
GATCATTCTC AGTATCCACT GTCTATGTAC AATAAAGGAT GTTTATAAGC AAA 53

35 SEQ ID NO:2267  
SEQUENCE LENGTH:53  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02590  
SEQUENCE DESCRIPTION:  
GATCCATTN TTTTGTGAAT GTGCTAAATA AAAAGTGTTA TNAATTGCTG AAA 53

40 SEQ ID NO:2268  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
45 CLONE:HUMGS02591  
SEQUENCE DESCRIPTION:  
GATCCTGCAT CCCACTCCCT GGGAGCCAAT AAAGTGCATT TTCACAGGCA AA 52

50 SEQ ID NO:2269  
SEQUENCE LENGTH:50

55



# EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02592

SEQUENCE DESCRIPTION:

GATCACAAAG TCAAAAACCC ATAAGAAAAA TTGAAAAAGC TACAAGCAAA

50

SEQ ID NO:2270

SEQUENCE LENGTH:50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02593

SEQUENCE DESCRIPTION:

GATCATATTT TCTATTAAAG TGGCTAACAC CTGGCTACTC TTACTGTAAA

50

SEQ ID NO:2271

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02612

SEQUENCE DESCRIPTION:

GATCTGTAAA TAAATCAGT GCACTGTGAA TCACACCCAG CCCCTTTCCC TGCTGTGTGG 60

ATTAGGTGTC AAGACACCTA GTTCTTTCTG GGGCCACCCG GCTGGCCTCA CTGCTTATAT 120

TAAGGCTCCT CCAACTCTC ATTTTCTTT GGAAAACAAG ACTTTTTTCC CCATGGTTAC 180

CGCTGAGATA CTGGGGCTGT AGTAGTATAA AAGCTCACAG TTCCTTCTGA GTGCTGAAAA 240

GAGTGCATGA GTTGCTTCGA AATAAAAGGG TCAAGCATTC CTACCTGAAA 290

SEQ ID NO:2272

SEQUENCE LENGTH:556

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02627

SEQUENCE DESCRIPTION:

GATCTGTGCT TCCNACTCAC ATGTNAGGCC ACGCCATCCT CTTGCTGAAN CCCTATTGAT 60

GCTTTCTAAC AGGTTCTCGT GTCTCTCCCT GACCAGGCC TCTTACAGAC TGCAGAATTA 120

CCATCCACAG TGTACATTGG ATGAGAAATGT GTCACCACCA TGCTTAGAAC CACTCCTATC 180

ACTGACAGGT CAATATCTGA GCTCCTTGGC ACAACACACA TGTCAGGGA GTGGCCAGTA 240

ATTAGTTGTG CCTGGAGTAT TGAGAGCATC AGTGGCCGGG AACATCAGGC AAGATGTGAT 300

GTTTTAAAGA GCCTTGAATG CCATGCTAAG GACTTNGAAC TGCATTGCAC AGCCCATGGG 360

GAGCTCTGGA AGGTTTAAAA GCAGNGAAGA NCCTTGCCTT TGTCTAAATT CTGTAAGTCT 420

CAAGCACTTC TGCTTTCCTT CATAGNACTT TGTAATTAT TTCAATTGGC TTGGTTNATT 480

TTTNCNNNA TTTTCCCTT AAATTTCAAN GTTTTGGGC GGGATTAAAT NNTGGCTTTT 540

TTGNTCNCNT TTTAAA 556

SEQ ID NO:2273

SEQUENCE LENGTH:527

# EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02628

SEQUENCE DESCRIPTION:

5  
10  
15  
GATCTGAACA TCTGGCCCAA GTGAAGCATG GCATATAGTG CCCTTGGAAG AAAATTAGGC 60  
CTCAAATGAC AGTAGCATTG AAGTGTTTGC TGCAGAGTTG AGGGAAACCC CCAGCCACCC 120  
TCCCGGAATC CGAGATAGGG TGGCACATCT GTCCTGACAG ACGAGGAGTG TAACTNAACC 180  
AGGAATATTT CCTCCATTCC TGCTCTCCCA CTGCACACAG GGTGGTGGCA CATTATCCCT 240  
CTGGGGGGTG GGGACGCCGT TTGTTTGGC TCAATTTGGG TTTGTTGGTC ACATGGAGCT 300  
CTTCCATTTC GTTTAGCTGA ATAATGAGTT GTTCCTAGAG GAGACAGCCT GTCTCTCCTT 360  
GTTNNCCNCA AAGCCCATGN CCTGNCGTGG TGGANCTGGG GCTTTTGGNT GGGGAGGGGN 420  
CCCAACAATG GATNTTNTTN CCTTNCCTCG AATTCCAACG GANTNNAATG TNCAAAGGCC 480  
CTTTNGAAAC TTGGNGGGAA ANTAAATTNC TNTNCCTNG NNGTGGN 527

SEQ ID NO:2274

SEQUENCE LENGTH:458

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02629

SEQUENCE DESCRIPTION:

20  
25  
30  
GATCAGCAGC CAATATGGGT TTGTTTGGTT TTTTAAATC TAAAAACAN CCTNTAGAGG 60  
AATAGAAACA AATTTTTATG AGCATAACCC TATATAAAGA CAAAATGAAT TTCTGACCTT 120  
ACCATATATA CCATTAGGCC TTGCCATTGC TTTAATGTAG ACTCATAGTT GAANTTAGTG 180  
CAGAAAGANC TCAGATGTAC TAGATTTTCA TTGTTTCATTG ATATGCTCAG TATGCTGCCA 240  
CATAAGATGA ATTTAATNNN NNNCAGCCAA AGCAATATAC TCTTACATGA TTTCTAGGCC 300  
CCATGACCCA GTGTCTAGAG ACATTAATTC TAACCAGTTG TTTTGCTTNT AAATGAGTGA 360  
TTTCCATTTT GGGGAACAGG TTTCAAATGG ANTATATNTA CATGGGTAAA ATTCCCCTGT 420  
GCTAGTGTAG GNCTTTCCTN GGGGAATGTT TTATGGGN 458

SEQ ID NO:2275

SEQUENCE LENGTH:452

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02630

SEQUENCE DESCRIPTION:

35  
40  
45  
GATCGACTAC AAGCCAGCCC CTANGCACCT GCTGCTACAT CATGAAGNTA NCTCCAGAGA 60  
GCATCCCCAG TCTTGAGGNT CTCAATAGAA AAGTCCACAA CTTCCAGGCC AAGCCCGCAG 120  
TGCCTACGTC TAAGCTGGGC CAGGCAGAGG GNCGAGATGC AGGCTCAGCA CCCTCCGGAG 180  
GGGACCCGGC CTTCTGGGN NTNGCCGTNA NCACCCTGTG TGGCGAGGTG CCGCTCTACT 240  
ACATCTAGGA CGNCTCCGT GAGCAGGGTC AGTGGAAGCC CCAACGGGAA AGGAAACGCC 300  
CCGGGCAAAG GGTCTTTTGC AGCTTTTGCA GACGNGCAAG AAGCTGCTTT CTTCCACAA 360  
CCGNAGGACC AAAACCCTTG GAGAAANTGN GNAGNTTGGN GGAGATGGAT TTGGGAGTTT 420  
GGCAANAGGG TTGGACCCNA NGNGGGCCCC GN 452

50  
55  
SEQ ID NO:2276

SEQUENCE LENGTH:451

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02631

SEQUENCE DESCRIPTION:

GATCTTGTTT ACTTTTGGAC ATCAAGCCCA TCACTGCCAG CCAGTNAAGA AGGATTCCAG 60  
 CCTATGCCCT CAATACAAT AAGACCACCA GATGACCAAC ATCTTCCTAC TGCAAATACT 120  
 TGCATTCTC GACTTIACGT CCCACTCTAT TCCTCTAAAC AGATTCTCAA ACAGAAATTG 180  
 TTACTCGCCA TTAAGACCAA GAATNTTGGC NNNGTGTAGA GTATAAAAAG TGTGTATTGC 240  
 TGTGTAATAT TACTAGCAA TTTTGTAGAT TTTTNTCCAT TTGTCTATAA AAGTTTATGG 300  
 AAGTTAATGC TGTCATACCC CCCTGGTGGT ACCTTAAAGA GATAAANTGC AGACATTCCT 360  
 TGCTGAGTTT ATAGCTTAAA AGGCCTAAGG GAGCACTAGC AANCATTTTG GGCTATATTT 420  
 GGGTTTGCTA GGTACCAAC TTCCTGGGG N 451

SEQ ID NO:2277

SEQUENCE LENGTH:446

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02632

SEQUENCE DESCRIPTION:

GATCCAGCCA GGCATCTCGG CGCTTTGGCA CCATGAGTTC TATGTCTGGG GCCGACGACA 60  
 CTGTGTACAT GGAGTACCAC TCATCGCGGA NAAGGCGCCC AGCAAACATG TACACCCGCT 120  
 CTTCAAGCGC TTTAGGAAAT NATNCTTAGG CAGGGTACTT CGTTCAAGAC CGGCGCTTGG 180  
 CACCCTTGTT GGAAAGGGNT TTTAGCATA ACATTTTCCT TCCACCTCTT TGACCTTCCC 240  
 TCCAGCGTTG GCCAAATTGT GCTGAGGAAG ATGCATCAAG NGNTTGGCTG TGCCTTCATA 300  
 GGTCACTAG GGTTTTATAA AGGAGGAGGA GACAATATT NTTCAAACCT TTTTGGGAGT 360  
 GGGGTCATTT TCTGTATATA AANAATGTTA ATATTAAAGG TGTAGTTTAT GTTACCGTTC 420  
 TGAATAAACA GATTNGGCCA TTNAAA 446

SEQ ID NO:2278

SEQUENCE LENGTH:425

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02633

SEQUENCE DESCRIPTION:

GATCCACACC TGACCCTGTT GGGTCGAGTT AGGNTGGGCC TTGGTCTGCA CTGTAGCACC 60  
 TNTGTTCTTT GAGTTCACAT CATGAATGTG GTGACTTNCC AGNTACCATA TCAGGCTTAA 120  
 CCTAGCACAT CCTATTCTT TNCTTCTATG ATATCCAAAT TGGACTGACC TCACTTCAAA 180  
 GTTGCTGTCC CATTTTGTCA CCCTATCTTA TCTCGGGGAA ATTGCAGACT GATGGCCAGA 240  
 CCAACTCTGT TGAATTCTT GCATAGAGCA AACCTGTGCT CATTTTAAAG TGGCATGGGA 300  
 GAGGCCCCCA GCCTAGTAAA GCCTAGTCTG TGTCTTACA GTGCTGGTAG NATGNGTTTT 360  
 GTGTGTATAA ATATATGATA TAGGATTGAT AATATGTTNN CTAACGGCCA TATTATTGAA 420  
 GGGCN 425

SEQ ID NO:2279

SEQUENCE LENGTH:414

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02634

SEQUENCE DESCRIPTION:

GATCTGCCTT AACTCCAAC TACATGTTTT GGTCAC TATT ACAAACTGTC ATCCCAGAAT 60  
 GATGCTGCAG AGGCTAGGGC TAGGACACAG ACCAGTGTTC CATGTGGGA ATTCCCTCCC 120  
 AGTATTTCTT AGGAANNNTA TGTTTTTTGA ATCCATAATC CTTAGAAAAA TCAGTTGAGG 180  
 AAATGAGAAG TATTGTAATT ATNCTGTGAA TAGTAACACT TACCATTATG GAGACATCAC 240  
 TAGTTTGAAA GANTCCAAC TCAATCAATN TTAACGTACC GAGTTGAAGG NTACAAGANC 300  
 TGAGACAGGA GCATAGCAGA GGAGAAACGG TCACCATCTC ATTAGCCCTA TTTTTTGGNT 360  
 TGTGTGATG CCATTACATC TGNAATAATC TGGGCCATNT CAGCTGCTAA TGGN 414

SEQ ID NO:2280

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02635

SEQUENCE DESCRIPTION:

GATCTCACCT TCCTTCGAAT TCGCTCCAAG AAAAATGAAA TTATGGTTGC ACCAGATAAA 60  
 GACTATTTCC TGATTGTAAT TCAGAATCCA ACCGAATAAG CCACTCTCTT GGCTCCCTGT 120  
 GTCATTCCTT AATTTAATGC CCCCCAAGAA TGTTAATGTC ANNNNNGTCA GTGGACTAGC 180  
 ACATGGCAGT CGCTTGGAAC CCACTCACAC CAATCCAGTG ACCGTGTGTG GGCTGGNGGC 240  
 TCTNTNTCCC NCNCCAACGG AACCCCNCTG TGCACCAACC TTTNNCNCAG AGN 293

SEQ ID NO:2281

SEQUENCE LENGTH:400

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02637

SEQUENCE DESCRIPTION:

GATCTGGCAG GGCACCACAG CGCCCCCTAC TGAACCATCA GCATGTCAGT GGCATTTAAA 60  
 GCCATGCAGC TGGAGGGGCC ACTGAGATTG TCTCTGAGTA TTACTGAGAA GCAACAGAAA 120  
 AGAGCCATGG ATGGAGCCCT TGGGCTCTCT GGGAAATGGG AAATCAGCCA AAGGACTGAG 180  
 AAGGAGTTAC CTAAAGGTCA GAGAAAACCA AGAGAGTGTG GTGTTCTGGA AGCTGAGCTT 240  
 TCTTTATTCA ACCTCATTCC CTTCTCCAAA TAAGCCACTT GTGTAGTTGG GCCCCTCCAG 300  
 GGTGGAAGGC AAGAGGAGAA AGGCACAGCG TTTGGGAAAC AAGACTTTTC CTGCAATAGC 360  
 CTGGGGAAGG AATAAAANGG ATAGAGGTGT TTGGGGGAAA 400

SEQ ID NO:2282

SEQUENCE LENGTH:400

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02638

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCTGTCCA ACGCCTGCAG CGTGGATGTG GAGGCGGACT AATCAACNAG TGCTCTGTTA 60  
 TTATTTCTAC CCATCCCTTT TCTCCATGCT AATTGCTTA GAACTTTAAC ATTGAATGGA 120  
 CAGCAAAATGT CATGTTCTGT TTAATTATCA CTCCTTGACC ATTATGTAA TTTCTTTCCC 180  
 TAACAAGGTG ACGCATTGTT TTAAGTAACA ATGACCAACT CATCTACTCT TCTTCCAAAT 240  
 TGTGTAAATT GAANGGGTAA AATGTGGGAA AACGCTAAAT TTGAATGCTA AATTTGAACA 300  
 TTTCACACAA CCAATAATTT TGAAATGCTT CTTNGCAATA TTATNGCGGT TTCGGNACCA 360  
 GGTTAAAAAT NNCTTTCATT TTCAGGNCAT TTTGGTCAAA 400

SEQ ID NO:2283  
 SEQUENCE LENGTH:386  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS02639

SEQUENCE DESCRIPTION:

GATCGATAAT ATAATTTATA ATGAAATTGC TTTATCAGCT ATTAATGTGA ACTACATCAT 60  
 CTTCATATAG CNTTATAACT CATTTGTGCT ATTCCATTTT CCTCTGTTCC TTTTATTTTC 120  
 ACTTCCCTTG TAATGTTAGT CTCCTTTGAC TGATTCTGA AGAGTTCATT TATGATTAAA 180  
 CATGTAAACA TTTTGTCTAG AATTGCAAAAT ATGTTTTTCC TCATTCATTT TACTATGGTG 240  
 TTTTATTTTT GGGTTATACA GAAGTNGTAT ATTGAAATAT AATCTNGTNC TGTTTTATGA 300  
 CTTTGGAGTT TTGTGGTTTT TTNAACCAN GTTACAGTG GNATCCNTNN ATNNGGTATT 360  
 GCCGTCNTAN TNCNGCAGT TAGGTN 386

SEQ ID NO:2284  
 SEQUENCE LENGTH:384  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS02640

SEQUENCE DESCRIPTION:

GATCTNNTCA AACAGCAAAC GCCCACAGAN GGGCCAGAGG NGGTGGTAAT CAGGGTGTGT 60  
 GGGTGNTTTT AGGGTTCCTT AGTGTGTTTT CTTTCACCCA GGGGGTGGTG GTCCCAGCCA 120  
 GTTTGGTGCT GACGGTGAGA GGAAATNAGA ATCTGTTTGC AAATTGTCCA ACCCAGCCCC 180  
 TCAACATGAG GGGCTTCCAT TTTNTGTGTT TTGTAAGGGA ACTGTTTCCT TCATGCCGCC 240  
 ATGTTCTGTA TATTAGTTCT GATTTCTTTT TAACAAATGT TATCATGATT ANGAAAATTT 300  
 CCAGCACTTT AATGGCCAAT TAACTGAGAA TGTAAGAAAA TTGATGCTGT ACAAGGCAAA 360  
 TAAAGCTGTT TATTAACCTT GAAA 384

SEQ ID NO:2285  
 SEQUENCE LENGTH:383  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

CLONE:HUMGS02641

SEQUENCE DESCRIPTION:

GATCTTTTCT ATAATATCCT ACTACTTTGG TTTTCCTAGC TCCATACCAC ACACCTAAAC 60  
 CTGTATTATG AATTACATAT TACAAAGTCA TAAATNTGCC ATATGGATAT ACAGTACATT 120  
 CTAGTTGGAA TCGTTTACTC TGCTAGAATT TAGGTGTGAG ATTTTTTGTT TCCCAGGTAT 180

AGCAGGCTTA TGTGGTGG CATTAAATTG GTTCTTTAA AATGCTTTGG TGGCACTTTT 240  
 GTAAACAGAT TGCTTCTAGA TTGTTACAAA CCAAGCCTAA GACACATCTG TGAATACTTA 300  
 GGATTGTAG CTTAATCACA TTCTAGACTT GTGAGTTGAA TGACAAAGCA GTTGGACCAA 360  
 AAANTTTATG GGCATTAAAA GGN 383

SEQ ID NO:2286

SEQUENCE LENGTH:424

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02642

SEQUENCE DESCRIPTION:

GATCTAAAT ACCTGGTGGC TTTTNACAAA AAGCAGATTT TNTTCATGTA CTGTNATGTC 60  
 TGATGCAATG CATCCTAGAA CAACTGGCC ATTTGCNAGT TTA CTCTAAA GACTAAACAT 120  
 AGTCTTGGTG TGTGTGGTCT TACTCATCTN CTAGTACCTT TAAGGACAAA TCCTAAGGAC 180  
 TTGGACACTT GCAATAAAGA AATTTTATTT TANACCCAAG TCTCCCTGGA TTGATAATAT 240  
 ATACACATTT GTCAGCATTT CCGGTCGTGG TGAGAGGCAG CTGTTTGAGC TCCAATGTGT 300  
 GCAGCTTTGA ACTAGGGCTG GGGTTGTGGG TGCCTCTTCT GAAAGGTCTA ACCATTATTG 360  
 GATAACTGGC TTTTCTTCTC CTCCTTGAA TGTACCATT NAAATAATTT TTTGAACCAT 420  
 CAAA 424

SEQ ID NO:2287

SEQUENCE LENGTH:378

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02643

SEQUENCE DESCRIPTION:

GATCCGAAGA GGAAGGGCGG TCCGGGCTCC AACTTAGCT TCGTGGGCAA ACGCAGAGGC 60  
 GGAACAAAC TAGCCCTNAA GACGGGAATA GTAGCCAAGA AGCAGAAGNC GGAGGATGAG 120  
 GTATTAACAA GTAAAGGTGA CGCGTGGGCC AAGTNCNNGG CAGAAGTGAA AAAGTACAAA 180  
 GCTCACCAGT GCGGTGACGA TGATAAACT CGGCCCTGG TGAAATNACG CCCCTCCCC 240  
 ACCTGCCCAT GGCCTGGGAC TCTCTGCGAT GTACATAACT ATTTAATGCA GCGGCANGTC 300  
 GACAGCTTTC CCTGAGAGGA CTTAAAAGCA GAAGGAAACC GAGATGCTTC CCGNAAGCCG 360  
 TGGACGATTC TCCAAGGN 378

SEQ ID NO:2288

SEQUENCE LENGTH:370

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02644

SEQUENCE DESCRIPTION:

GATCTTCTTG ACTATGCCAG TTGTAGTACC AGCTTCTGTA TCTGCACTGA ATTCTGNCTC 60  
 AGTAATATGC CTTTGTITAA AATTTAAATA TTTTTCATT TTTTAACT AGAAAATAAT 120  
 TATAATGAAN NNNNTAAGTA TCTCATTTA GGATTCTGAT TTACATAGGT ATCACTGTAA 180  
 CTTGTGCTGT TTGCATAGGT ATACTCTATC TTGTGCTATC TGCATAAAAT ATCCAAGTAA 240  
 ACACATTGTG ATTTTACATC CGTGCATAGA AAAAAAATC ATCTGAACTC AAATCAATCT 300

GTGATACTG ACTAGATTGG TGACGTGTTT ATGTGTACCA CTAGTGATAA TGCACGGTCC 360  
TGTACAAGCN 370

5 SEQ ID NO:2289  
SEQUENCE LENGTH:370  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS02645

SEQUENCE DESCRIPTION:  
GATCACAGGA ACAGCAGGTG ACAGGCCTAG CTATAGTTAG GAATACACAA GCCGTAAAT 60  
CGAGTCCTTA CAGCCATACC ACAAGGTACG TCCANNTGGA CTACAAGAAG AGCTTCCTTT 120  
15 AAAGTTCTTA TTTAGCATA AAGAGGCTGT CCTTTTTTT NAGGAATAGT TTGGACCTTG 180  
TGCCCTCCTGT GGGAGGCTGA GGACTGCAAG AGGAGAGCTA GCAGATATGC CTGTTACCCC 240  
CTCTCTGGTA CTTGTGGCTT GCTAGTATGT TTTNATGATA ATCTCGGGCA TTGTTTGCAT 300  
TTGTGTTTAT TAATAGGGTT TTTGTTTTTT GTTGTTCCT NTTTTNACAG TAANGGCTGA 360  
ATTACATAAA 370

20 SEQ ID NO:2290  
SEQUENCE LENGTH:367  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
25 CLONE:HUMGS02646

SEQUENCE DESCRIPTION:  
GATCTGAAAG GAATGCTAGA AGTGTTTAGA GAGCTGACAG ATGTCCGACG CTAAGGGGG 60  
CATGCNACAG GGGGAATGGC TCGCTTCAGT GCCCTGCTGC TCAAAGCTCT AGGGNAGAAT 120  
30 GCAGTCGGGT AGNCTGTGGG GCTCTAACCC CACAGCAACC TCTAGGGATG ACGTCACTAA 180  
AAACCGATGA AGCCTCCATA ACATTGGTTC CTTACTGACG CTGAGGAGCA NGGCAATCTT 240  
CACACCTTAA CCAATGCTAT TCATGTAGGA TGACCAAGAA ATGAATGTTT CTTACTGAAA 300  
TAATACATAT TTTTGGCATC TTTTGGTTAC CCATAGACTA ATTAANCTA ATCCNNGGNT 360  
TTATAAA 367

35 SEQ ID NO:2291  
SEQUENCE LENGTH:359  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS02648

SEQUENCE DESCRIPTION:  
GATCCTGACA GAGCCCTGAA CAGATTATAT CACTCGGCTA GAGGCACTGC AAAGACGACT 60  
TGGAACATA CAGTCAGGTT CAACTACTCA ATTTTCATGCT GGCATGAGAA GATAATCCTT 120  
45 TGAAACATCA TTAATTGAAG TGATTTTAAA TAGATTTCTT TTTGTAATC AATGGTTCTT 180  
TTGTGCTTTN GNNNNNNCGA ATATTCAATG GGACCAATAT GAACACAGCT TATGATTGTA 240  
TACAAATCCC TTGCCAGCAC ATGAAANCAA ACTGGANTTT GTATATATAA GCATTGTGTA 300  
TGTATTCTAG CACAATAATT ATNGANTTAC CTGTATATTT GTGGGAATGC TAATTTAAN 359

50 SEQ ID NO:2292

SEQUENCE LENGTH:357

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02650

SEQUENCE DESCRIPTION:

GATCTGTGGG TCCGGCTGNA GGAGAGTGAC ATAGTCCCGC AACTCCANNT TGCCTGTCCT 60  
 GGACAGGCAC ATCTCCACTG AACTGCCGCT CCNTGCCCGT GGGCATTCCC ACCACAGCCA 120  
 GATGGTGGCC AGCAGTGCCT GCCTGTNTCT CTGGACTCCT GTGTTCTGGG TGCTGGTGCT 180  
 GGCTTTCCAA ACAGAGACAC CGCTCCTGTA ACGACTGGAA GCACCAGGCT AAGNACCTNA 240  
 CCCCTCGNAC TTNGAAGGAA TGGGCATTNC NGTACTTCAA CATTCTGGGT CTAGGCCTTG 300  
 TTGGGGCCAA TTCAAGAAGN GGCCTTGTTN TTNGAAAAA GTGGGCCNNG TTTTNAN 357

SEQ ID NO:2293

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02651

SEQUENCE DESCRIPTION:

GATCCTTCTT TTTGGTTTTG GAAATATAAT CATTGTTAAT GTTTCCCTC CAAATAGAAT 60  
 ACTGTTTTAT CCATACAAAT CATAACAGCA TCTATCCCAT GCTAGGGTTG GAAACTGATA 120  
 TTGGTATTAC TTGTGTTTTT CCTTAGTGTG TTTATTTCC CAGTTTCATC TNCTTTTAAA 180  
 AATGAAAATA TGGTGCCTTC CCTCCCTCCA GGAAGACTGG CAAATATTNC CTTTATTTA 240  
 CTGCTGCTGT GGAGTGATGA GATATGCACT TTACTCTTTA AGATTGAGCA AAAAGCTTTT 300  
 CACTTCTCAG TATATCCAGA ATACATCATA TCTGGGACTT AGGAAAAATT GCCAN 355

SEQ ID NO:2294

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02652

SEQUENCE DESCRIPTION:

GATCTTTTAC ACCACATCAC AGTGANCACA CTGGGGAGAC GTGCTTTTTT GGNAAACTCA 60  
 AAGGTGCTAG CTCCTGATT CAAAGAAATA TTCTCATGT TTGTTTCATC TAGTTTATAT 120  
 TTNCATTTAA ATCCTTTAG GTTAAGTTTA AGCTTTTAA AAGTTAGTTT TGAGAATTGA 180  
 GACACAATAC TAATACTGTA GGAATTGGTG AGGCTTGACT TAAAACTTTC TTTGTACTGT 240  
 GATTTCCTTT TGGGTGTATT TTGCTAAGTG AACCTTGTTA AATNTTNGT TAACTAAATN 300  
 TTTTCCTTAA AATAAAGACT TTTTCACAAA 330

SEQ ID NO:2295

SEQUENCE LENGTH:352

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02653

SEQUENCE DESCRIPTION:

GATCCTATGG ATTTTCCCGG CTGGTTGCCA CTA CTNTACA ACATT CANAG CCCACATCCA 60



5 TCTGTGCCAT TAAGCTTTTT TGAGACATGA GAGATGCCTC TTCCTGCTG TATGACATGC 120  
 ATTTGGGAAG TTGGAAAGAA ATGACAAAAT CAGGGAGAAA ACATCCAAGC TTCTTACCTG 180  
 TAGATAGAAT CAGCCCTCAC TTGGTGCTTA TTACCAGTTA TTCANGGACA ATAACAACAA 240  
 CAAAATTAGT AGACATNCAT GANGCACATN TTTAGGNCCA AAGGNTAGCA TCAACTTGTA 300  
 TTTNGAAGGG ACTGTAGTTT TCGGCATTTT ATGGCNATTT TTTATNAAAG TN 352

10 SEQ ID NO:2296  
 SEQUENCE LENGTH:351  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02654

15 SEQUENCE DESCRIPTION:  
 GATCGCAGCC GCTTCGCACG CCGCATCACC CAGGCCCAGG AGGAGCTGAG CCCCTGCCTC 60  
 ACCCTGTCTG CCCGGGCCAG AGCCTGGGCA CGCCTCAGGA ACCCACTTT AGCCCCATC 120  
 CCTGCCCTCA CCCAGACCTT GNCTTCCTCC TCTGTCCCTT CGTCCCCAGT NCAGACCACG 180  
 CCCTTGAGCC AAGCTGTGGC CACACCTTCC CGCTCGTNTG CTGCTGCAGC GGCTGCCCTG 240  
 GACCTCAGTG GGAGGCGTGG CTGAGACCAA CTGGTTTGCC TATAATTTAT TAACTATTTA 300  
 TTTTCTCTAA GTGTGGGTTT ATATAAGGAA TAAAGGCTTT TGATTGTAA A 351

25 SEQ ID NO:2297  
 SEQUENCE LENGTH:357  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02656

30 SEQUENCE DESCRIPTION:  
 GATCCCCGTT CTGACATCA CAGCAGCCTC CAACACAAGG CTCCAAGACC TAGGCTCATG 60  
 GACGAGATGG GAAGGCACAG GGAGAAGGGA TAACCCTACA CCCAGACCCC AGGCTGGACA 120  
 TGCTGACTGT CCTNTCGNGT NCAGCCNGTG GCCTTGCTT TTCTAGCCTA TTTACCTGCA 180  
 GGCTGAGCCA CTNTCTTCCC TTTCCCAGC ATCACTCCCC AAGGAAGAGC CAATGTTTTN 240  
 CACCNATAAT NCTNTCTGCC GANCCCTAGT TCCCTCTGCT CAGCCAAGGT TTGTTATCAG 300  
 35 GTTTTCAGGG GCCATGGGTT CACATTAAGG ATTTAAAGG GTAGTAATTT GGGGAAA 357

40 SEQ ID NO:2298  
 SEQUENCE LENGTH:344  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02657

45 SEQUENCE DESCRIPTION:  
 GATCAAAATTT NAGTGGCTTT GGACAGAAAA GAAGGCTCTG GATTAAAGCG GGTGGTCACC 60  
 TGTGAGACCA GGTCTACCTT GGGACTGTTA TTAACTGAA TCAGTTATTT CCTTGAAATT 120  
 TCACAGTAGT GGGTGGGCCT GTTTAAAGGC TCTGACAGAT ACCACGAAAC ATGANGCNCG 180  
 NNGAACTACA AGACCCCGG GGTCTTTCTG AGTGCAAGGC TGAAATGGAC AAGGGCTCCT 240  
 CACGGGGGTG GAGGGAGCCG GAGCCTGCCT TGTGTTCTTT TTTGACTTGT TGACATTTTT 300  
 50 CAAACACATA ATTAAAAGGA CTTATGCTCT GCTGTCTCAG GAAA 344

EP 0 679 716 A1

SEQ ID NO:2299  
SEQUENCE LENGTH:462  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02658  
SEQUENCE DESCRIPTION:  
GATCTGGTCC CTGAGAAACA TATTGTGATG AAGTGGAGGT TAAATCTTG GCCAGAGGGA 60  
CACTTTGCCA CCATCACCTT GACCTTCATC GACAAGAACG GAGAGACTNA GCTGTGCATG 120  
GANGGTCGAG GCATCCCTGC TCCTGAGGAA GAGCGGACAC GACAGGGCTG GCAGCGGTAC 180  
TACTTTGAGG GCATTAAACA GACCTTTGGC TATGGCGCAC GCTTATTTTA GGGCCAGCGG 240  
CAGGGGACTC CAGCCTGCTG GACACTTCAN GTCCAGCTCT CTCCTGACTG GGGCTTNCGA 300  
CTCACAGGAT TGCATCGNCC CAGCTGCTAA CTNNGGGCCG GGGGCCCNTC CCTTNCACAA 360  
TATACCTTGG GTTNTGTCAT GTTTTCCTNN CTGGGTTGGG GTTCAGAGGG GCAATTCNN 420  
CTTTAATGG TGTACATATN NCTANATANN CATAATTTTA AA 462

SEQ ID NO:2300  
SEQUENCE LENGTH:341  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02659  
SEQUENCE DESCRIPTION:  
GATCAACTTC CCACAACTG AGGAATGAAT TCCACGAGCC TGTCTGAAA ATNTGGACGT 60  
AAGACAAACA CGTGCTCGTC CTTTAATGGA GTTCACCAGC ACACTTGTTA ACCAGTCCTG 120  
TTTGCTTTTCG TCTTTTTTTG TCGTAATAA AGTCAACTGA CCAAGTGACC ATGAAAAGGG 180  
GCTGCTGGG GCTCCTGTTT TTNAGCTGCT GTTCTTCAGC TCCGACCATG TTGCTGTGTG 240  
ATTATCTCAA TTGGNTTTAA TTGAGGCAGA AACTGAAGCT CTACCAATGA ACTGTTAGAA 300  
ACAAGACACA CTNTNGTATT AAAATTGCTT GCAGTAACAA A 341

SEQ ID NO:2301  
SEQUENCE LENGTH:339  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02660  
SEQUENCE DESCRIPTION:  
GATCNGTGGC AAAACCAAGT GTGGTCTTTC AGCTTCAGTG TGTTAGCATC CCAGCACCTG 60  
GGATGGGGTT TGTGGGCAAG TTGATTTTGC CACACTGTAG GGCCAGGTN NNCCCATTGC 120  
CACCGTGAAG CCAAAATNCTA GCCCAAGTCT GGTAGAGCAG TCGGGCAGCT AGTTTTCCGG 180  
GGAGGATGAT GTGGTGGGAC AGAGGACCTC AGTGGCCTAT TACGGAGCCC TCTTCCCAGA 240  
CTAAATTCAT AGCCGAGAGC TCGGGGGGAT GGTAGAGTTA AAATTTAAAA TAATTTTCTA 300  
AATTCTGTAT TTGGATATTA GTGTTTAAAGT GGTAATTTN 339

SEQ ID NO:2302  
SEQUENCE LENGTH:441  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear

CLONE:HUMGS02661

SEQUENCE DESCRIPTION:

5 GATCCAGGGG CTGCCTCTGG CCTCTTAGGG AGCAGAGAGC AGAACTCCGC AGCCCAGCCC 60  
 AGAGGAGTGT CACCTCCCAC CTTTGGAGAG GAATCCTTCC CTCCCCTGGA CAAAGTTGCT 120  
 GACAAGCCCC TGAAGTGGCC TCTCCATATT CCAGCTGAGC CTGAATCTGA CTCTTGAGGG 180  
 TTGGGGCTGC ACTTATTTAT TGCGGGGAGA CAGCTCTCTC TCCCACCTNC TCCCAGATG 240  
 GGAGGAGAGC CTGAGGCCCA AGCAGGACCC GGGGGTTCCA GCCCCTAGCT GCTCTGGAGT 300  
 10 GGGGGAGGTT GGTGGACCAT GGGAGTNCCT GGTGCTGCCC CTNAAGGTGG GACCCAGGCG 360  
 TTNTCAAGCT GTACCCTTTT NCCGATGGAA TTTGTGTTTT TGAANATNNG TGTCTNNTAC 420  
 TANTNTTTT AAATAAAAAA N 441

SEQ ID NO:2303

15 SEQUENCE LENGTH:336

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02662

SEQUENCE DESCRIPTION:

20 GATCATGGCA TCCAAGACCA GAGTCTCAGA ACTCATTAAG AAACAGTTTA CTTGGAATGG 60  
 AGAATACCCA TCTGTAATAC AGGTCTGTG ATTTTCATTCA TCTCAAATTA TTTTGAATTC 120  
 TTCCCAAATG GCTGCTGGAT TTAGGTGGTA ATAGGGGCTG TGGGCCATAA ATCTGAAGCC 180  
 TTGAGGAACC TTGGGTCTGG AGAGCCATGA AGAGGGAAGG AAAAGAGGGC AAGTCCTGAA 240  
 25 CCTAACCAAT GACCTGATGG ATTGCTCGAC CAAGNCACAG AAGTGAAGTC TGTGTCTGTG 300  
 CACTTTCAC AGACTGGNGT TTTTGGTNCT GAATAN 336

SEQ ID NO:2304

30 SEQUENCE LENGTH:363

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02663

SEQUENCE DESCRIPTION:

35 GATCAAGTNA CTTCTGCCCA CCTGGACACA ACACCAAAAA GGCTTCTAAA NACGGGTGTN 60  
 AGTCTTTTNA GCAACCCGGT CCAGTACTGG GAGATACAGC CATCCACCTT CANATGTGTC 120  
 TACGTGCGCT CTGCCATTCA ACTCGGAAAC TATAAGTAAT TCTNAAGAAA GCCCTCATT 180  
 TTATAACCTG GCAAAATCTT GTTAATGTCA TTGCTAAAAA ATAAATAAAA GCTAGATACT 240  
 40 GGNAACCTAA CTGCAATGTG GATGTTTTAC CCACATGGCT TTATTATGCA TAANGCCAAT 300  
 ATTTCTGTG TTAAGTAATN GCCTTCAATT NNNAAGNTAA TTTTGGCCTG NCCCANAAAT 360  
 AAA 363

SEQ ID NO:2305

45 SEQUENCE LENGTH:232

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02664

SEQUENCE DESCRIPTION:

50 GATCAGAGTT CCTCCTACTT ACAACCCAGG GTGTGAACAT GTNCTCCATT TTCAAGCTGG 60

55

AAGAAGTGAG CAGTGTGGA GTGAGGGCTG TAAGGCAGGC CCATTGAGAG CTATGGTGCT 120  
 TGCTGGTGNC TGCCACCTTC AAGTTCCTGA CCTGGGCATG ACATCCTTN TTTAATGAT 180  
 GCCATGGCAA CTTAGAGATT GCATTTTAT TAAAGCATT CCTACCAGCA AA 232

SEQ ID NO:2306

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02665

SEQUENCE DESCRIPTION:

GATCTTAAGT ATAATTACAA GGAAGAAGTG AAGAAGAATA TTCTCTTAGA AGAGAAGGTA 60  
 AAAAACTTT CAGAACAATT GGGAGTTGAA TTAAGTAGCC CTGTTGCTGC TTCTGAAGAG 120  
 TTTGAAGATG AAGAAGAAAG NNCTGTTAAT TTCCCCATT ACTAAAGTC ACCTATAAAC 180  
 TTTGTTTCAT TTAAGTATTT ATTAAGTTTA TAAGTTAAAT ATACTTGGA ATAAGCAGTT 240  
 CTCGGAAGT TAGTATTTCC TTCTACTAC CTGGGTACCT TTATACTTAG ATTGGAATTC 300  
 TTAATAAATA GAATTATATG AAATTTTCAN 330

SEQ ID NO:2307

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02666

SEQUENCE DESCRIPTION:

GATCGACTTA CTCACATGA GACAATTCAT ACTGGTGTGA ACCACANAAA TGCAAAGAAT 60  
 GTGGTAAGGC CTTTAGTCAT TGCTATCAAC TTAGTCAACA TCAAAGATT CACCATGGTG 120  
 AGAGACTCTT AATGTAATGA GAGGGAAAGC CTTAGCCAT GGAACATTT TACTGTTGTC 180  
 ACTATTATNA TGCTATAGTG AAGATTAAAC TAGTTAATAT AGAATATAAA TACTTGGAAG 240  
 GGCATCTGGC ACATCGTATT TGCTTACTAA ATACATTATT TTTATGATAA TTGTTAGAAT 300  
 TACTAAAAAT AAATCTTATA GAAGGAAA 328

SEQ ID NO:2308

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02667

SEQUENCE DESCRIPTION:

GATCTCAGGT ATCAGACCAC TGAGCAACCC ACCGCCAGNC TGCAGGCTTT CAGAGGCCCA 60  
 CCTGGGCCCA GCGTGGCCTG CCCCAGGGTG GGCTCCAGC GCAACTGCAG GCATCCTCTA 120  
 GTGGGGCCTC TGGTAACCCT AGCAGATGGT GTGACCCCC CTGAGATGAG GAAGCTGGTG 180  
 ACCTNNGACT GAGCAGCAGC CTATGGGCTC CGGGTCAAGT GCTATTCCCA GCGGATGCCC 240  
 TTCCCCTTGC GNCAGTCCCT CCTTNCCTGA GTGTCCAGGC GCNANTGNAA AACAGNAACC 300  
 CTAGGGTCTG GAAACTACTT TTTTTN 327

SEQ ID NO:2309

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02668

SEQUENCE DESCRIPTION:

GATCCAGTTG TTATAGTGAA CTCATGGTAA TGGTTTGTGA GAACAATAGA GATTTTNATT 60  
TCTATGTAGA TGAGTTGGTA TGAGAAATATA TGGAAATTTT AAGGGACTGT TTAATCTTT 120  
GATTTGTAGA CTATTAAATA TACCGTATGC ATAAAGTAAG CCTTTAGCTC TAAGGTAAAG 180  
ACGACACGTT TTCGGTTTGT GACTACAAAT AGGTTAAAAA TAGATTTTAA TTTTATTAAA 240  
AATATAATTT AATGCAGGTT GTTGAAGCA TCTGTCTTCA TATGATGGCA TTAGAACACC 300  
TTGGTATAAT AAAAAGTTAC CGTAAA 326

SEQ ID NO:2310

SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02669

SEQUENCE DESCRIPTION:

GATCAAGAAG GAGCTAGAGA CCATTTCAAA GAAAAAAAT GCTTTATAGA GTTTTAAGTA 60  
TGACTTAGAT GGGTCCAGGC AAATAAATA AAAAGAAGTG AAGGCAACAT GTATCGTCTG 120  
GCAGAACTAA ATCTGGAGT GGGGTGAGGG ATGAAAGACT ACATATTGGG TACAGTGTA 180  
ACTGCTCGGG TGATGGGTGC GCTAAAGTCG CAGAAATCAC TAAAGAACTC ATCCATGTAA 240  
CCAAACACCA CCTGTACCCC AAAAACGAAA TAAAAAACA AAACCTTGGG GCCCATCCCC 300  
CCTAGGAATG GACTACTGTA AA 322

SEQ ID NO:2311

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02670

SEQUENCE DESCRIPTION:

GATCTAAATT ACCTGGGGT TCGCATATGT CTATGAAATN CTGTGATAAN GTTTTCAAT 60  
ACATTGNTTC ACTGGCGTCT GTTTTCANTT TATACTTTA ATAATCATC ACTGGTGGTA 120  
CTTTATCTTG AAAAGTAATA TTTTNATAT TTTANCATTG GACAGTGTTA GCCAGTTGTA 180  
ATGATGTATC AGANGTAAAG AAAAACCCAT TAAAGTTATA GCTAATAGAT GCTGTTGGGG 240  
GTAAATTAA TAGTAAANTA ATCCAATATA GCACTNTNNA TGATTTNTTA TATAAANGTC 300  
AACTGGTACA TTTCATTGAG N 321

SEQ ID NO:2312

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02672

SEQUENCE DESCRIPTION:

GATCGAAGGG TTTTATAGAGA ATGNTTTTCA AAACCATGCC TGGTATTTTC AACCATAAAA 60  
GAAGTTTCAG TTGTCCTTAA ATTTGTATAA CGGTTTAATT CTGTCTTGT CATTTTGAGT 120

ATTTTAAAA AATATGTCGT AGAATTCCTT CGAAAAGGCCT TCAGACACAT GCTATGTTCT 180  
 GTCTTCCCAA ACCCAGTCTC CTCTCCATTT TAGCCCAGTG TTTTCTTTGA GGACCCCTTA 240  
 ATCTTGCTTT CTTTAGAAAT TTTACCCAAT TGGATTGGAA TGCAGAGGTC TCCAAACTGA 300  
 TTAATATTT GAAGGGAAA 319

SEQ ID NO:2313

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02673

SEQUENCE DESCRIPTION:

GATCGACAAA ACTTTGAACG AGGCTGACTG TGCCACCGTC CCGCCAGCCA TTCGCTCCTA 60  
 CTGATGAGAC AAGATGTGGT GATGACAGAN TCAGCTTTTG TAATTATGTA TAATAGCTCA 120  
 TGCATGTTTC CATGTCATAA CTGTNTTCAT ACGCTTCTGC ACTCTGGGGA AGAAGGAGTA 180  
 CATTGAAGGG AGATTGGCAC CTAGTGCGTG GGAGCTTGCC AGGAACCCAG TGGCCAGGGA 240  
 GCGTGCGACT TACCNGNGGT CCCTTGCTTC ATTCTTGTA GATGATAAAA CTGGGCACAG 300  
 CTCTTAAATA AAATATAAAT GANCAAA 327

SEQ ID NO:2314

SEQUENCE LENGTH:313

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02675

SEQUENCE DESCRIPTION:

GATCAACCAC ATGCACATCC TTACTIONACA ATCCGTCCTT TCATTTCAAC ATTATAGCAA 60  
 GCTATGATTT TNATATATAA ATATTATATA AATNANGTAT AANACATTAA AAGTTAACTA 120  
 TGTAAGATAT TATNTCTGAA ACAATTTAGC TATATCCACT ATGATTATAA ACTGTGTCTC 180  
 GACCTGTGTT ATNTACANAA GCTGCTTAAA AAAGCATTGA GTTAATTTN TTAATATCA 240  
 ACTAAATAT CATAGTTCTG TGGNNGACAT TGTGTTATAA TGANATAACT GCAACTAGAG 300  
 AAANCTGTAT AAN 313

SEQ ID NO:2315

SEQUENCE LENGTH:365

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02676

SEQUENCE DESCRIPTION:

GATCGAGGAC ATAAGGAACT AGTCACAGTG TTGCTGCAAC ATAGAGCTGA CATTAACTGT 60  
 NAGGACAATG AAGGCCAAAC AGCTCTACAT TATGCCTCTG CCTGTAAGTT TCTGGATATT 120  
 GTAGAGCTGC TGCTCCAGTC TGGTGCTGAC CCCACTCTCC GAGACCAGGA TGGCTGCCTG 180  
 CCAGAGGAGG TGACAGGCTG CAAAACAGTT TCTTTGGTGC TGCAGCGGCA CACAACTGGC 240  
 AAGGCTTAAT CAAAAGACTG GAAAACAGCA GTCTGTAATA GCATAAGGCT TCCATTATGA 300  
 AAGAAAATA CAGAAATAAT ACTTCTTTTC CACCCGCTCT TGGTATGTAT TGGCTTATAA 360  
 AATTN 365

SEQ ID NO:2316

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02677

SEQUENCE DESCRIPTION:

GATCCTGGAG CTGGCTGGCA ACGCGTGGCT NACAACAAGA AGACCAGGAT AATCCCCGC 60  
CACCTGCAGC TCGCCATCCG CAACGACGAG GAGTTAAACA AGCTGCTGGG CAAAGTGACC 120  
ATCGCTTAGG GCGGCGTCCT GCCCAACATC CAGGCCGTGC TGCTGCCCAA GAAGACGGAG 180  
AGTCAGAAAG CGAAGAGCAA ATNACCCTGA CGCCGNCCTC AGGGAGCTGN CTNCGNCANA 240  
TAAGGCCCTT TTNATGGTCG TCCCGCAATG CTTTGAATG TGCTGGNTGT CATGGAGGGC 300  
CGGTGACN 308

SEQ ID NO:2317

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02678

SEQUENCE DESCRIPTION:

GATCTAGATA ACTCATGACA TTTTATTGA CCAACATAGC ACATGATGAG ATATCAAGGT 60  
AATTAAAATA GCATGCTTGA AAAAAAATA CGTAATCTGT TTCACCTGTA ACTGTTTAAG 120  
CCAATAAACT TTTCAAAT TATGTAATGT GGGGCTTTTA TGTAGCACTT TACGTTTCA 180  
TGCTGCTTAT TGTTTTATTC TACTGAAAAA AATGANNTTC AAGATTCTCA ACTTNTTAA 240  
TTTCAAAAAT NGTTTATGGT TTTGACTATA GGAATACAAA ANTCCTATT TNGGGNGAAT 300  
AAGAAA 306

SEQ ID NO:2318

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02679

SEQUENCE DESCRIPTION:

GATCCCCTGG CTCCCAGCA CACATTCCTT TGAAATAAGG TTTCAATATA CATCTACATA 60  
CTATATATAT ATTTGGCAAC TTGTATTGT GTGTATGTAT ATATATATAT GTTTATGTAT 120  
ATATGTGATT CTGATAAAAT AGACATTGCT ATTCTGTTTT TTATATGTAA AAACAAAACA 180  
AGAAAAAATA GAGAATTCTA CATACTAAAT CTCTCTCCTT TTTTAATTTT AATATTTGTN 240  
ATCATTTATT TATTGGTGCT ACTGTTTATC CGTAATAATT GTGGGGAAAA GATATTAACA 300  
TCAAA 305

SEQ ID NO:2319

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02680

SEQUENCE DESCRIPTION:

5 GATCGAAATC ACTATAATTT TAACCCTNGT GATTGGAATG AATATGGTTT GTGCTGGAAG 60  
 CTCCGAGGTG GAAGAGACTC GTGCAATGGA GATTCTGGAA GCCCTTTGTT GTGCGAGGGT 120  
 GTTTTCCGAG GGGTCACTTC CTTTGGCCTT GAAAATAAAT GCGGAGACCC TCGTGGGCCT 180  
 GGTGTCTATA TTCTTCTCTC AAAGAAACAC CTCAACTGGA TAATTATGAC TATCAAGGGA 240  
 GCAGTTTAAA TAACCGTTTC CTNTCATTTA CTGTGGCTTC TTAATCTTTT CACAAATAAA 300  
 ATN 303

10 SEQ ID NO:2320  
 SEQUENCE LENGTH:302  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02681

15 SEQUENCE DESCRIPTION:  
 GATCCCTGCT GAATCCACAG GCCAAAATAG TCAATGTAAC TGCAATCTA ATTCATCCT 60  
 CCTTTCCTGA GGCCAACTCA GGAAATNAAA GGACGATTCT AATTCCACT GCGGTACTT 120  
 TTGTGGATGT GTCTGCACCT GCAGAGGCAG GCITCANAGC TCCACCAGCC ATCAATGCCA 180  
 20 GGCTGCCCTT TAACCTCTTC TTCCCGTTTG TTGACAATG CTCAGATGCA TCAGTTCCTT 240  
 AATATACAG TGAAATTGA AACTGTACA TTCGGTGAGA TTAATTTTA TATACAATA 300  
 AA 302

25 SEQ ID NO:2321  
 SEQUENCE LENGTH:301  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02682

30 SEQUENCE DESCRIPTION:  
 GATCCAATTA AAAAAAATTA AAACCAATTT AAAAAAAAAA AGANCACAGG AGATTCCAGT 60  
 CTACTTGAGT TAGCATAATA CAGAAGTCCC CTCTACTTNA ACTTTTACAA AAAAGTAACC 120  
 TGANCTAATC TGATGTNAAC CAATGTATTN ATTTCTGTGG TTCTGTTTCC TTGTNCCAAT 180  
 TTGACAAAAC CCACTGTTCT TGTATTGTAT TGCCCAGGGG GAGCTATCAC TGTACTTGTA 240  
 35 GAGTGGTGCT GCTTTAATTC ATAAATCACA ANTAAAAGCC AATTAGCTCT ATAACTANAA 300  
 A 301

40 SEQ ID NO:2322  
 SEQUENCE LENGTH:345  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02684

45 SEQUENCE DESCRIPTION:  
 GATCAAGCGG AAAGAGTTTA AGTGTCTAAC AAACCTAAAG CTA CTGTAGT ACCTAAAAAG 60  
 TCAGTGTGTG ACATAGCATA AAAACTCTGC AGAGAAGTAT TCCCAATAAG GAAATAGCAT 120  
 TGAAATGTTA AATACAATTN CTGAAAGTAA TGTTTTTTTN CTATCATCTG GTATACCATT 180  
 GCTTTATTTT NATAAATNAT TTCCTCATTG CCATTGGAAT AGATATCTCA GATTGTGTAG 240  
 50 ATATGCTATT TAAATAATTT ANCAGGAAAT ACTGCCTGTA GAGTTAGTAT TTCTATTNN 300  
 ATATAANGTT TGCACACTGA ATTGAAGAAT TGTTGGTTTT TTCCN 345

55



SEQ ID NO:2323

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02685

SEQUENCE DESCRIPTION:

GATCTTTTCT AATATGGTAT TACAATGAAA AGAATAAAGA GAAGATTGGA ATTTNCAGTT 60  
 TCATTTTCAA AAACATTTTA CCAAAACAAA TGGAGAAGAA ACATCCAAAA GCACATTTCA 120  
 TTTCTCCAAA CTGTGTGTTT TAAATTATAG TTATAAATNG TAAGGTAATT TAAATTGTC 180  
 CCTCGTATTA TTNCTCCACG CCTGTTTTAG TNTNNGGTCT CCTAAGCTTT TCTCTCATAG 240  
 CGTAGACCTA GGGGAAGGGAT GGGGAAGATTG CCCAGTCCCC GATGGCTGCG CACACAGGN 299

SEQ ID NO:2324

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02686

SEQUENCE DESCRIPTION:

GATCCCTCTG TACAGGCTGG ATGGAAGGGG CCCTCCACAC TTCCTGGGAG GTCAGAGACA 60  
 AACTGTTTCA GAGAGTCAGA TGGACTTCCC AAGACTTGTT GAGAGATGTG ACATGGTTCT 120  
 TGGATTTCCT CTGTAGCAGC CTCCTGGACT TCCTGAGGAC TCGACATTGT CCACAGATGT 180  
 ACTGGCCATT ACATGAAACA AGAAACCAAG CATCTTTGCT GTTGTTAATT ATTATATGTG 240  
 CCATTGTTAC AGGAGATTAT AGGCTAGTCT GTAATAAATT ATCTTATAGC AGCCAAA 297

SEQ ID NO:2325

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02687

SEQUENCE DESCRIPTION:

GATCAGCAGC CGAGAAAAGT ACATCAACAA TCAGCTTGAG AATTTGGTTC AAGAATATCG 60  
 TGCAGCTCAA GCCCAGCTGA GTGAGGCAAA GNAGCGATAC CAGCAGGGAA ATGGAGGNGT 120  
 GACGGAAAGA ACCAGACTCC TCTCTGAGGT TNNGGAAGAA TTAGAAAAGG TAAAAACAAGA 180  
 AATGGAAGAA AAGGGCAGCA GCATGACTGA TGGTGCTCCT TTGGTGAAGA TTAANCNNNG 240  
 CTTNNCANAA CTGAAGCAAG AANCTGTAGN GATGGACATT AGANTTGGCA TTGTGGN 297

SEQ ID NO:2326

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02688

SEQUENCE DESCRIPTION:

GATCCNACTT TAGAAGCCTA CTTTNTAACC AAGGAGCTCA ATTTTTTTTT TAAAGCTTTA 60  
 CTAATCTACC ANAGCATTGT AGATATTTTT TTTTAACATC TATTGTTTAA AATAGATNAT 120

TATAACGGGG CAGAGAACTT TTTTTCTCT GCAAGAATGT TACATATTGT ATAGATAAAT 180  
 NAGTGNCATT TCATACCATG TATATATAGA GATGTNCTAT AAGTGTGAGA AAGTATATNC 240  
 TTTAATAGAT ACTGTAATTA TAAGATATTT TAAATTAAAT ATTTTTTTGT AAATAAA 297

SEQ ID NO:2327

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02689

SEQUENCE DESCRIPTION:

GATCCTATGT CTGTCTGTCC ACCACGAGAT GGGAGGAGGA GAAAAAGCGG TACGATGCCT 60  
 TCCTGACCTC ACCGGCCTCC CCAAGGGTGC CGGCACTCTG GGTGGACTCA CGGCTGCTGG 120  
 GCCCCACGTC AAAGGTCAAG TAAGACGTAG GTCAAGTCCT ACGTCGGGGC CCAGACATCC 180  
 TGGGGTCCTG GTCTGTNAGA CAGGCTGCCC TAGAGCCCCA CCCAGTCCGG GGGGGNTGGN 240  
 GAGCAGTTC AAGACCACCN CACCNCTTTT TGTAATNTT GTTCATTNTA ANTCAAATAC 300  
 AGCGTNTTTT TCANTTCTGG GAAA 324

SEQ ID NO:2328

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02690

SEQUENCE DESCRIPTION:

GATCTGCAGG GGTCTGGGAG TCAGGCCCGG CCTATTGCTT GGGTCTCTCT CTATTTATAT 60  
 ATCTAAGTTC ACAGTGTTTC TTATCCCCC TAAGCTTCTA GAGGCTCATG GCCCTGTAGT 120  
 TAGGCCTGGC TCATTCTGCA CCTTCCAGG GAGGTGGAAG GACCCTGTGC CCTCCTTCCC 180  
 AATCTTCTTT TTCAGGCTCG CCAAGGCCTA GGACCTATGT TGTAATTTA CTTTTATTT 240  
 CTAAGATTGT AGTGAAGCTC TCACCCATAA TAAAGGTTGT GAATGTTCAA A 291

SEQ ID NO:2329

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02691

SEQUENCE DESCRIPTION:

GATCTAGAAT CTCTTTATGT TCTCCAGAGG AAGGTGGAAG AAACCATGGG CAGGAGTAGG 60  
 AATTGAGTGA TAAACAATTG GGCTAATGAA GAAAACTTCT CTTATTGTTT AGTTCATCCA 120  
 GATTATAACT TCAATGGGAC ACTTTAGACC ATTAGACAAT TGACACTGGA TTAACAAAT 180  
 TCACATAATG CCAAATACAC AATGTATTTA TAGCAACGTA TANTTTGCAA AGATGGNCTT 240  
 TANAAGATGC TGTGTAGCTA ANCTGAANTA ATTCATTAC TTATTATTTN 290

SEQ ID NO:2330

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02692

SEQUENCE DESCRIPTION:

GATCACTCCG CTTTNTCCTG GGCTCCCGTA GCACACTATA ACATCTGCTG AAGTGTGCT 60  
GTTGCACCAT ACTTTCTTGT ACATTTGTGT CTCCCTTCCC AACTAGACTG TAAGTGCCTT 120  
GCGGTCAGGG ACTGAATCTT GCCCGTTTAT GTATGCTCCA TGNNGGNCC ATCATCCTGC 180  
TTGGNGCAAG TAGGCAGNG CTCAATAAAT GTTTGTTGCA TGNNGGNAA A 231

SEQ ID NO:2331

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02693

SEQUENCE DESCRIPTION:

GATCGCCTAC AAGCCAGCCC CTGGCACCTG CTGCTACATC ATGAAGATAG CTGCAGAGAG 60  
CATCCCCAGT CTTGAGGCTC TCAATAGAAA AGNCCACAAC TTCCAGATNG AATGCTCTCT 120  
GCAGGCCAAG CCCGCAGTGC CTACGTCTAA GCTGGGCCAG GCAGAGGGGC GAGATGCAGG 180  
CTCAGACCCC TCCGGAGGGG ACCCGGNCTT CCTGGGCATG GCCGTGAACA CCCTGTNTGG 240  
CGAGGTGCCG CTCTACTACA TCTAGGACGN CTCCGGGTCA TGTGN 285

SEQ ID NO:2332

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02694

SEQUENCE DESCRIPTION:

GATCTAGAGG TTCCANTGCT ATNCTCTCTT CTTGCTGAG AGCCAGGACC CTGGGGGAAA 60  
TAACGGGCAA AAAAGCACTT TNAAGACAGA TATAGTGGGA ATTNATAAAC GACTTGATAG 120  
AAACAGAAAT GAACTGTTTT ATTNATNCT CTGAGGACTC TGCTCATCAC CCANTAGTAC 180  
CATTTCTTTT CTCAGAATGG ATTCTTTCCC CTATCTATCT AATCATTAGA GATGTAGCTA 240  
NGAAATTACA TGTATGCATA TGTNTAATAT GTATATGTNT ATGTN 285

SEQ ID NO:2333

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02695

SEQUENCE DESCRIPTION:

GATCTTAAAG CTTTGAGCAC CTGCCATTTT GCCTTGCATC GTTTCCTCG TCATGCATTT 60  
CCACATATCC ACAAACACAG AACGACTTTA GACAAGCACA TGTTACACCT GTGTTGCCAC 120  
AAGCAGTCAT TCTTGACGGC TCCAGTTTTT ATTTGACACT TGAGTTTAGT TTTCTCTTTT 180  
ATAAACCCAG TGAACCTCTG CACTGGCATT TGGATGTGTG TTAATGCTAT TTGTTTTGTC 240  
TTAAAGTAA AACCTTTCTC AGTTTGAAC TGTATTCTCT AAA 283

SEQ ID NO:2334

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02696

SEQUENCE DESCRIPTION:

GATCTATTAA AAAGGTTAAG AGGCCAGGTT ACCCACCANT CCTTGCACTG TNCTGACACT 60  
 TTCCCCAGGA GGAAACAAG TACAAAGGTT ACGGTGGAGG CATAAGTAGA AGAGATTGTN 120  
 AAGAAGGGTA ATTCATGTNT CTTTGCTCTT NCTGCTTTAT GCCTCANTTT GGTTTAAAAA 180  
 CTTCTNTACT GGCAAATGGT GGTATTCACT GTGGGATAGT GTCATAACTA ATTTGACAAT 240  
 TTATTAATGA TAAAATAACA ATAAATGTCT AGCTTTTACA AAA 283

SEQ ID NO:2335

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02697

SEQUENCE DESCRIPTION:

GATCACAAAA AAATCAGTCT TTAAGCATTG GCTTGGTAAG GTTTCTTAAN ATNAGGTTTA 60  
 TAATACAACC ATCTGTAATG TATCTNCTGN TTGANCTTGT GGGCCATACA ATTCATTAAAC 120  
 TAGATGNATA CATTGTGGAC AGCATCCTCA CTACCCCTCT CTACTIONCTC ACAAAGAACC 180  
 ATGATACACT GGAATGTTTT TNTNTGGAAT CCTCTTTCTA CTCTTGATT AAAATTTTNC 240  
 CCCACTTCAT GATTATATNC AAAATAAACA ACTACATCAT AAA 283

SEQ ID NO:2336

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02698

SEQUENCE DESCRIPTION:

GATCAGCTTG CAGAGTCTTG CTTTtaggtt AGATACAAAC AAAGTAAATC ATAGTTGGTG 60  
 TAAATCCAGC AAAAAACAGC TGGCTTGGGA ATGGAGAACA CTACAATTCA AATTGAAAGT 120  
 ATATTCAGAA GAAAACTTTG GAATTAGCTT TACATTTGTT TGTAAATCTA AACAAATNTG 180  
 CAAAATTGGT CAAAATGTAA GTNTATNGCA TTTTAAAGA TTANTGGTTC CTTTATGTG 240  
 CTGATTTCTT TGTATTCTGT TCTCTGCATT CATCATTCAG GN 282

SEQ ID NO:2337

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02699

SEQUENCE DESCRIPTION:

GATCTGTACC ACACCTTCGG GCCAGCTGTC CTCCTGCTGA TGTCCTCAG TGTCTACAAG 60  
 GCCTTTGTTA TGGAGACCTT CGTCCACCTC TGCTCGCTGG GCAGTTGGGC AGCTCTACTG 120  
 GCCCAGCAG TGGTAACGGG GCTGCTGGCC CTCAGCACTT TGGCCCTGTA TGTCGCCGTT 180  
 GTCAATGTGC ACTCCTAGGC TTGGTGTCTC AGACATTTGA TGTACCTTTT CCCTGNCTCG 240  
 NTCCAGGTTT TTAGTGAAGT AAACAGGTAT TTTGAAAAGT TAAA 284

SEQ ID NO:2338

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02700

SEQUENCE DESCRIPTION:

GATCAACGAC AGCCTCCAGT TTCCACTTNG TGAGAGAACA AAGGAACCGG GGCATGCTCA 60  
NCTATGGCTG CAAGCCNTTC AAGTGAAGCT GGGCACTTAC CCCCTTNATT CCATTCTCCT 120  
CAGGATAACA GATTAATAAT CCAGAAGTGT GCACCTGTNG TNTATTCAGG AGATTNTCGT 180  
TNTGCATAAA GAGACCACTT GAGGCCCTGT AAGCAAAGAC TAATTNGGTC TNAGTCAAAA 240  
TCTTGGAAT CTGATNAACT AACACACTCA AATGAACTN 280

SEQ ID NO:2339

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02701

SEQUENCE DESCRIPTION:

GATCTGGAGC AGGAAGGCCT CGAGGCACAC AGGGGCTGCT GGCCGGCGAG TGGGCCCCAC 60  
CCCTCTGGGA GCTGGGCAGC CTCTTCCAGG CTTTCGTGAA GAGGGAGAGC CAGGCTTATG 120  
CGTAANTTCA TAGCTTCTNC TGGCCTGGGG TGGACCCAGG ACCCCTGGGG CCTGGGTGCC 180  
CTGAGTGGTG GTAAAGTGGA GCAATCCCTT NACGCTCCTT GNCCATGTTT TNAGCGGNCA 240  
GNTTGNTTT NNCCCTTNAAT AAATNTGCTT TATTTNCTCT TCAAA 285

SEQ ID NO:2340

SEQUENCE LENGTH:320

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02702

SEQUENCE DESCRIPTION:

GATCGTAAAC TTGTTGATAA AGAAGATATC GACACTAGCA GCAAAGNAGG CTGTGTCCAA 60  
CAGGCTACTG GCTGGAGGAA AGGGACAGGC CTGGNATATG GCCATCCTGG ATTGGCTTCA 120  
TCAGAGGAGG CTGAAGGCCG GATGAGGGGC CCCAGTGTG GAGCCTCAGG AAGAACCAGC 180  
AAAAGACAGT CCAACGAGAC TTATCGAGAT GCTGTTTCGAA GAGTCATGTT TNCTCGATAT 240  
AAAGAACTCG ATTAAGNAAG GNGNCAAGTT CCATGGGATA CAACCTACCT CTTGTTTTGT 300  
TTGTCTCTCC TTTCTTTTN 320

SEQ ID NO:2341

SEQUENCE LENGTH:519

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02703

SEQUENCE DESCRIPTION:

GATCTGAAAG GAGCAAGGAA CAGCAAGGAA TTATTTTCCA GAATGACACC CGCAGCAGAA 60

TGTGGAGTG GAAATGATGG CTGGCTATGA AGAGGAGGTC AACGTGTGTG GTCTCCTCAG 120  
 TCTCTGTCAG AGGGGTGGGG AGGTGGGAAA CAGGAATCCT CTGCAAAGCC CAATCTGCAG 180  
 AGTCGAGACC CCTGGTGTCT TCTGCCCCGC TGCCTGGCAC TGGTCCTTTG CAGCCAGCCA 240  
 CCAACGGCCC CCTTGCCCTT NCAGAGGCAG AAGCCTNCGT CTNAACCTGC ACCTCTGACC 300  
 GTTNAGCAC CNTTGGGTTN TTACCANGTC CTANAACTCT GANATTTNTT NGTTCTAAAA 360  
 GGGGTTTCTA TTTCAACTTG NTGAGTTTGT NTTTTGGGNC CTTCCAATT GGGNTACCTT 420  
 GNTATNTTN ATGGTTTAT AAATCCTTNA CTCTTGGNAN GTTTTAATTN TTTACAAAAT 480  
 CAGGGATAAC TTTNGTTTNA ANACTGGTTT GAAGGAATN 519

SEQ ID NO:2342

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02704

SEQUENCE DESCRIPTION:

GATCCCAACT AATTTTACCG AACCTAAAC CCACAAAGAG GTTGTGTTG TTATTGTTCA 60  
 ATCTTCAGTT GTAAGAGTAA TTCTCTATTT TNATATTGAA ACATAATTAC TTGATAGCTC 120  
 AGGGTCTACA TTTCAATCAA CTTTTTACAC CAAATTCTGC AGAGTGGTCA AAATGGAATA 180  
 TTGGGGGCTG TTGTAACAG AGGCTTAATT TTATTAGAAG TAGCCAGTTA TTTATTAAAG 240  
 CATGATGTTA ATAAATAGG CATATTCTGA AA 272

SEQ ID NO:2343

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02705

SEQUENCE DESCRIPTION:

GATCTGACAT GATTCCTTCC TGTCTGAAC TGTGGGGTGT GCACATCTCT ACTTGAGTCA 60  
 GGTTNAGTA GAGGCTTAGA GACAGTTAGG TGAGAACAAC CAAAATCTTA TCATGGTCTC 120  
 AGTCANNATC ATTAGGGGGA ACTCTAGCCA AATNGTTTAA CTTCTGCCTG TGGAAGTGGG 180  
 GATTGGGTGG GCAGGAAAAG GTGATATCCA TTCTTTCTGA TAACTAGATG GTGCTGAGAA 240  
 GCTTTTGAAT AAAAAGTTTG CTAATGAGA AA 272

SEQ ID NO:2344

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02706

SEQUENCE DESCRIPTION:

GATCTTTCCC AGGCCGCACC ATTTCTNTCA CTCACATGGA CCCAAGATAN AAGAATGGCC 60  
 AAACCCTCAC AACCCCTGAT GTTTGAAGAG TTCCAAGTTG AAGGGAAACA AAGAAGTGT 120  
 TGATGGTGCC AGAGAGGGGC TGCTCTCCAG AAAGCTAAAA TTAAATTTCT TTTTCCTCT 180  
 GAGTTCTGTA CTTCAACCAG CCTACAAGCT GGCCTNGCT AACAAATCAG AAATATGACA 240  
 ATTTAATGAT TAAAGACTGT GATTGCCACC AAA 273

SEQ ID NO:2345

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02707

SEQUENCE DESCRIPTION:

GATCCATGAA GCTGCCCTGC CCACGCCTCC CCTCCCTGTA GCAACACCTC TGGGTGTTTG 60  
 GAGTTTAGCT TTTGTGGGTT TGCTCTCCCT ATCCCATCTC CTGTACTACA CAGTTCATGG 120  
 CAGGGTGGGG AGNNGTGGGG TTGGTTCGGG TGGGTGAGGG TCTTTTCCT CTGTGTGCGA 180  
 TGTGTGTTATC TGACAGNTCT CCGTCCCTAC TGGCCTTTCT CCTCGTCTTC ATATTTGTAC 240  
 GGTACAAGCA ATAAAGACAC TCATTTTCAGA CCAGAAA 277

SEQ ID NO:2346

SEQUENCE LENGTH:431

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02708

SEQUENCE DESCRIPTION:

GATCTTNCTA GGAGGGAGAC ACTGGCCCTT CAAATCGTCC AGCGACCTTC CTCATCCACC 60  
 CCATCCNTCC CCANTTCATT GCACCTTNAT TAGCAGCGGA ACAAGGAGTC AGACATTNA 120  
 AGATGGTGGC AGTAGAGGCT ATGGACAGGG CATGCCACGT GGGCTCATAT GGGGCTGGGA 180  
 GTAGTTGTTT TTCTTGGCAC TAACGTTGAG CCCCTGGAGG CACTGAAGTG CTTAGTGTA 240  
 TTGGAGTATT GGGGTCTGAC CCCAAACACC TTCCAGCTCC TGTAAACATAC TGGCCTGGAC 300  
 TGTNTNTCT CGGCTCCCA TGTNGTCCTG GTNNCGGTTT TNTCCACCTA NGAAGTAAA 360  
 CCTCTTCGAG GGCAAGGGAC CACACCCTGT AACTGTTCTG TGNCTTTTAA CAGGTTCCTN 420  
 CCATTAATGC N 431

SEQ ID NO:2347

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02709

SEQUENCE DESCRIPTION:

GATCTTTTGT GTCTGGTTCC TTTCACGTTG AACGCTATTT TTAAGGTTTC TGCCTGTTGT 60  
 AGACCACAGT CACACACTGC TGTAAGTCTTA CCCCATCCTC ATCCCAGCT GCCTCCTCCT 120  
 ACTGTTTCCC TCTATCANN NGCCTCCTTG GCGCAGGTTT CCTGAGCTGT GGGATTCTGC 180  
 ACTGGTGCTT TGGATTCCCT GATATGTTCC TTCAAATCCA CTGAGNATTA AATAAACATC 240  
 GNTAAAAGAA TGACCTTCCC AAGGNA 268

SEQ ID NO:2348

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02710

SEQUENCE DESCRIPTION:

GATCAGAAAC CAGTCTCCTT CCCCGTAGTC TGGACTGGGT ATCCCCTCTT AAATNTTTC 60  
 AAAGCAACAC AAATTTAATT CCGTCACAGA ACTTGCCACT CTGTGCTGTG TCCTCTGTTT 120  
 CCTTGCCATC TTCCTCAATN AGCTGGAAGC CCATTGGCAG CAGGGACTGT TTCTTGTTCA 180  
 CAGCTGCACC TCAGTGCTAA GCATAGTGCC TGGTAGGTAA TAGACTCCTT AAGTATTGT 240  
 TGAATTAATA AAGGATGNNT TTTTAA 268

SEQ ID NO:2349

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02711

SEQUENCE DESCRIPTION:

GATCAGAAGC CATTNATT GGTAGGTGTG TCAGAAGGA GAATGATGNN AGACGAACTG 60  
 CTGGAAGAGG TCAGAAGATA GCCATGCTAA AATGCAATTA TATCCTCATG TTTATCCCAA 120  
 ACTAATCTTG GACTTTTCCA CTCATTAGCT TTGTTNTGCC CTTGTTTCCC TTGAAGGTTT 180  
 AAGTTCAACC ATATTCTGTC AACTGTTCAG TTTCAGTGGA ATCTTGATT TCTGGTTCAT 240  
 TATAACAAAC TGTTCGCTTA AATCCAAA 268

SEQ ID NO:2350

SEQUENCE LENGTH:398

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02712

SEQUENCE DESCRIPTION:

GATCCGAGAA CGCTCTAAGC CTGTCCACGA GCTCAATAGG GAAGCCTGTA ATGACTACAG 60  
 ACTTTGCGAA CGCTACGCCA TGGTTTATGG ATACAATNCT GCCTATAATC GCTACTTCAG 120  
 GAAGCGCCGA GGGGCCAAAT NAGACTGAGG GAAGAAAAA AATCTCTTTT TTTCTGGAGG 180  
 CTGGCACCTG ATTTTGTATC CCCCTGTAGC AGCATTACTG AAATACATAG GCTTATATAC 240  
 AATGCTTCTT TCCTGTATAT TCTCTGTCT GGCTGCACCC CTTTTCNCNG NCCCCAGATT 300  
 GNTAAGTAAT NGAAAGTGCA CTGCAGTGAG GGTCAAAGGN GAGGCAACAT ATTNTNNTT 360  
 TCCATAATAA AACTTTCTTG GGGGNNATAC TTTTCAA 398

SEQ ID NO:2351

SEQUENCE LENGTH:381

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02713

SEQUENCE DESCRIPTION:

GATCTGCAAG CATTGCTCT TGTTCACACA TCACCTCTGG GATATTTTCTG CTGTTGTTTC 60  
 CAAATGGCAA ATCATCAACT AAANGCACTT GTTCAAGTT TTGTTCTGCA CTCCCACGAC 120  
 TGAAGTTGTA GATTGAGCTG AATAACCATG GGAAGTGANC AAGCAAAGAC ACTCGATTGG 180  
 AGTCAGTTGA ATATTTGTAC CCTCAGTGGA GCCCTTCTGG TCTTTTCTTC CACTTCTGCA 240  
 GAATTTCTCT TAGCAAATAC TTCTTTCTCC TTGTTTGCCT CCACCATGAT ATTTGAATAA 300  
 GAGATGGCCA GAGGATAACA CTGTCTCTT AAAAATAAG CTAAAAAGGA CCTAGGAACC 360  
 TTCAATTGA GCAGTTGGTT N 381



SEQ ID NO:2352

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02714

SEQUENCE DESCRIPTION:

GATCTGCCCCG CCTTGGCCTC TCAAAAGTGT GGGATTGCAG GCGTGACACG TGCTCCTGGC 60  
 TTGAATTTTC TTATAATCCC ATGAAACCAT CATCAGAGTC ACAATAATNA ATTTATCTAA 120  
 TCTATCACCT TTGTATTAC CTGGAGCCTT TATAAAGTTT TTNTCTATGC AGACAACCAT 180  
 TGATTACTC TGCTGTATAA TACTTTCCAT TTTCTAGAAT TTTCTGACTG ATGTAATAAA 240  
 GTGTTTCCTC TTATAATCCC TGA AAA 265

SEQ ID NO:2353

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02715

SEQUENCE DESCRIPTION:

GATCGGGGGC TTGAACCCAG GTGGTCAGGC TCTGGAGCCC ACAATTGTNT TACCCACTAT 60  
 GCCCCCTCTCT AGTCATGGTC CCCAAGAGGG GCTTGGAGAC CCACCTTAGCA GGTGAAAGCA 120  
 ATGGCAGCCT TCCTTATTG ATTATGCACC TAAGAATAAA TGGTATTGG GCATGTATTC 180  
 CCAATATGTG TATATTTATT TATAAATATA TACAGATACT ATNATCTGTA TGTNAGTAAT 240  
 AAAGCTTAAA TTATTCCATT TTA AAA 265

SEQ ID NO:2354

SEQUENCE LENGTH:379

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02716

SEQUENCE DESCRIPTION:

GATCGGCGGA CGCCATCAC CGTGGTGAAG CAAGGCTTTG AGCCTCCCTC CTTTGTGGGC 60  
 TGGTTCCTTG GCTGGGATGA TGATTACTGG TCTGTGGACC CCTTGGACAG GGCCATGGCT 120  
 GAGCTGGCTG CCTGAGGAGG GGCAGGGCCC ACCCATGTCA CCGGTCAGTG CCTTTGGAA 180  
 CTGTCCTTCC CTCAAAGAGG CCTTAGAGCG AGCAGAGCAG CTCTGCTATG AGTGTGTGTG 240  
 TGTGTGTGTG TTGTTTCTTT TTTTNTTTN NNNAGTNTCC AAAAAAGCC CTNAAAAAAT 300  
 TCAGGGNCCT TGA AAAATTN TNTAAAATGC CAGNNTTTGG GGAAATNAAA CCCANTAAAA 360  
 ACNTTTTGAG GGTGNA AAA 379

SEQ ID NO:2355

SEQUENCE LENGTH:261

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02717

SEQUENCE DESCRIPTION:

GATCACAAAA CAATTCTAAA ACCTAACTGT TTTTACCATT GAAATTTAAA TTGTGATAAT 60  
 AGGTTTTTAAA TGTCTAGAAT GCAACTGATA GGCTTTTCTT GAACTGTTAG TTTTTTTGAA 120  
 GTAGTTTTTT CATGTTTANN NNGTATTTGT AAAAAACAA AAAGCAAAAA AATTCCCAA 180  
 ACCCAGATAA CAACCAGAGC AAAACTGTTG TGCCTTCTAT TTATCTTTGA TTTCAGTCTT 240  
 GGCAATTGTT TAAAAA N 261

SEQ ID NO:2356

SEQUENCE LENGTH:259

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02718

SEQUENCE DESCRIPTION:

GATCATTGGA GAGAGAATTG CACAGAAAGT CCTGAAGTTT AAAACACTTT ATGACCAGCT 60  
 TTGGCTCGGG AGAGTGGGGC TGCTTGTA TAGTGGAAAGT AATAACTTTT TCAAGCAATA 120  
 TCAGTGAGTG GGTCCCATCG ACAGGGTTCC AGGACCTGGA ACATTTAAC AGAAGGAAAT 180  
 GCCGAAGCAG CTTGCACAGT NGCTTGACAG ACTTCCAAGN NGGCTGATTG TGGCTTCAAG 240  
 ATGGAGCCTT GGAGTTGGN 259

SEQ ID NO:2357

SEQUENCE LENGTH:296

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02719

SEQUENCE DESCRIPTION:

GATCTGGGAG TACACCAGGC AGCAGCTGCT CTCGNACGGA GATACCAAGC CATGATGTGC 60  
 CNNNNTTAGT GAACTGCTGC TGCTGTTTCA ACTTTTTTAA AAAAACTAT TTGGACTAAA 120  
 GAAACAGATT CTGAAATTTA TTGTGATAAT TTGTATTTCT TTTTCTTGC AATTTAATGC 180  
 CAAAAGTTTG CCATGTGCCT TAAACATATT ACTATATATT TNCCCCTTTA ATAAACACTT 240  
 TTNGTTAAAT TGTATTCTTC CTTAATAAAA ATATTTTAAG CAATTGTGGA AATAAA 296

SEQ ID NO:2358

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02721

SEQUENCE DESCRIPTION:

GATCAGAATA CATGATGGAT GAAATTCCTT ACATGTTTTA GCAGAATNAA TTTGTTTAAT 60  
 ATAATAAAGT TTGCTACTTA TCTGTATGTA GGTGCTAAA AANGATTTTC TTAACCTAGA 120  
 TTTTAAGCCA AATAACCATT TAACACTAGT ATTTGTTAAA TGGGTATTT TNCTGTATTT 180  
 GTATGTTTCA CTATAATAAG GGAATTAAGG ATAATGTGCA TTGAGAATAT TTGAAAANT 240  
 AATTGACTCA AATN 254

SEQ ID NO:2359

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02722

SEQUENCE DESCRIPTION:

5 GATCAGTTAT AAGTAGCAGG CCAAGTCAGG CCCTTATTTT CAAGAACTG AGGAATTTTC 60  
 TTTGTGTAGC TTTGCTCTTT GGTAGAAAAG GCTAGGTACA CAGCTCTAGA CACTGCCACA 120  
 CAGGGTCTGC AAGGTCTTTG GTTCAGCTAA GCTAGGAATG AAATCCTGCT TCAGTGTATG 180  
 GNAATAAATG TATCATAGNA ATGTAACCTT TTGTAAGNCA AAGGTTTTCC TCTTCTATTT 240  
 10 TGTAAGTCA AAN 253

SEQ ID NO:2360

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS02723

SEQUENCE DESCRIPTION:

20 GATCAATCCC AAGAATCCAT CAGCAACCTC AGACCAACCC AAGAAGATAA TTTAAATCTA 60  
 TACTGCTTAT TGGTCAATAT ATTTGGTTCT AGTATTAATA AAGAAAAATG TTATTAAT 120  
 AGCATACATA GTAGTAAAAT AAANTACANA AAGTGTGTTG ATTTATAGCT GTTTGAGATG 180  
 ATAAAAAGTGN AGCAAAGCCT GTTAAATCAT TGGAAGACTT GGANANTTAT TTTAAATAAN 240  
 CAATTACATG TAN 253

25 SEQ ID NO:2361

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02724

30 SEQUENCE DESCRIPTION:

GATCTGCATA AACAGGGTTC CTGACCTCAC CGAAAAGACT AATGTGCCTT AGAACAAGCA 60  
 TTTGCTGTGT TTTGTTAGCA CCTGGTTCCA GGACAGACCC TCAGCTTCCC AAGAGGATAC 120  
 TGCTGCCAAG AAGTTGCTCT GAAGTCAGTT TCTATCGTTC TGCTCTTTGA TTCAAAGCAC 180  
 35 TGTTCNTC ACTGGGCCTC CAACCATGTT CCCTTCTTCT TAGCACCACA AATAATCAAA 240  
 ACCCNACATA AA 252

SEQ ID NO:2362

SEQUENCE LENGTH:251

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02725

SEQUENCE DESCRIPTION:

45 GATCTTCTCA GCCAGGAGAA GAGGGTGGTG TTTTCACGCG GGCAACTGCT CGCCGGCCTA 60  
 CATGGGGTTA ATTCAAGTCT GCTGCGAGCA CGACTCCGCC CTTGGCACTG GCCTCCAGCA 120  
 AGCCCTGTTT TCTTTGGGGT ACAGGGGAAC GGGATGGTTT AGACTTTCCT GCTCAGTGTG 180  
 TAAAAAATGT AGCTAAAGCC ACTATTTTGT CTCTCCTTAA GCTGTTCAAT AAACCGGTTT 240  
 50 CTCATTTTAA A 251

55

SEQ ID NO:2363

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02727

SEQUENCE DESCRIPTION:

GATCTGGAAC ACTCCCCTGA CCCCTTCACA CCTGGCCCTC CCTGGGCTTA AAGCTCCTGA 60  
TATTCCTCAT CCCCTTCCTT GTTTCCAGA ATCGGTCGAG GTGGACGTT TGGCCGTAAA 120  
GGTGTGGCTA TTAACATGGT GACAGAAGAA GACAAGAGGA CTCTCGAGA CATTGAGACC 180  
TTCTACAACA CCTCCATTGA GGAAATGCCC CTCAATGTTG CTGACCTCAT CTGAGGGGCT 240  
GTNCTGCCAC CNAGCCNCAG NCAGGGCTCA ATCTCTGGGG GGCTGAGGGA GCAGCAGGGA 300  
GGGGTGGN 308

SEQ ID NO:2364

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02728

SEQUENCE DESCRIPTION:

GATCGTAGAT TTTTAACAAT CTGTATCTTT AACAAITCTG GGTGCNAGTG TNAGAGTGTG 60  
AGCAGGGCTT GCTCCTGCCA ACCACAATTC AATGAATCCC CGACCCCCCT ACCCATGCT 120  
GTACTTGTGG TTCTCTTTTT GTATTTTGCA TCTNACCCCG GGGGGCTGGG ACAGATTGGC 180  
AATGGGCCGT CCCCTCTCCC CTGGTTCTG CACTGTTGCC AATAAAAAGC TCTTAAAAAC 240  
GCAAA 245

SEQ ID NO:2365

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02729

SEQUENCE DESCRIPTION:

GATCTAACCA ACTCAACTGA TAGAAAGCTG AATTGTTCCC AGTGGACAAG TGGTATTGA 60  
TGTTTAGCAG GTTTTTTGT TGTTATTTT TTGGTAACT CTGTGGTAAA ATCTAAAATA 120  
ATGTTAAAAAC CCTAAAAAGTA ACTATTGANT ATNCTGTAAT CTTAGACATG TATTTTCAA 180  
GCTAACCCCTT TGAAGAAATG TGTCAAGGT AGGAAAATAT AAAATTTTTT GGTATTGT 240  
AAATTTAAA 249

SEQ ID NO:2366

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02730

SEQUENCE DESCRIPTION:

GATCATGCAT TGTGAGGTG GTCTGAATGT TCTGACATTA ACAGTTTTCC ATGAAAACGT 60  
TTTATTGTGT TTTAATTTA TTTATTAAGA TGGATTCTCA GATATTATA TTTAATTN 120

ATTTTTTCT ACCTTGAGGT CTTTGACAT GTGGAAAGTG AATTGGAATG AAAAATTAA 180  
GCATTGTTTG CTTATTGTTT CAAGACATTG TCAATAAAAG CATTAAAGTT GAATGCGAAA 240

SEQ ID NO:2367

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02731

SEQUENCE DESCRIPTION:

GATCTATACT GTGTGGTCAT GAGTTGTGTA TAGTTCATA ACACTGTATT TTNCTNCTGT 60  
CAGTACCCCT AGGATACACT NTAAACACC TTAAGGTCTG ATGTTATGGC AACAACTAC 120  
TTNTTCAAAC CTAATAGGA ACCATGTAAT TNCTCAAAG TGATTGAACA GTTGCCAC 180  
ACTTAGTTTG TTGGTCTTAT GTAAACATT GGCTCAAAT AAAGNNCACA CTGATTTATT 240  
TNACTGNNA A 251

SEQ ID NO:2368

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02732

SEQUENCE DESCRIPTION:

GATCTGAAAA TTTATTTCAC CCAGCTTTCA CAATTAAGTC TGTATAAAT GTGGTACCTT 60  
TTNGTACCTA TCCAGAGAAA CCTGTACATA TTCAATGTTA TCTAGATGTG ATTGGATAAT 120  
GGAGAAAAATN TATTTATAAT GATTTTNCAA TGGCATCAAT AACATTTAAA TGATTTTGAA 180  
GAAGTATTAT TTTACTACCC TATAAATGA ATCGAAAATA ATAAAGTTCT TAACATAAA 239

SEQ ID NO:2369

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02733

SEQUENCE DESCRIPTION:

GATCAAATTA TCTTCAGCAT GTATATCTGG GGAAAAAGG TCCGAATTTT CACATTTATA 60  
TTTAAANTTC AATTTTTTAT ATTTAAANTT CAATTTTTTA GCAACAGCTG AATAGCTTTG 120  
CGGAGGAGTT TAATAGTTAC ACATTCATGC TAATATACAT TNCCTTTAAA CATCCACAAA 180  
TTCTTAAAAA GATTGAATCA GTANATTCA TTTCAGCTAA AAATGGAGTC TAATATATN 239

SEQ ID NO:2370

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02734

SEQUENCE DESCRIPTION:

GATCCACCCG CCTTGGCCTC CCAGAGTGCT GTGATTACAG CTGTGAGCCT CCGTGCCAG 60  
GCCAGTGTTT TCTCTTAAAT GTGTTTCAAT ATGGTGGACA TTTATTGAGC ACTTGTGTTG 120

GGCGTTTCAA CAGGAGGCAC TGGTACGAAA AGTAGCTTGT TCTAGTTCAT ATATCATTTG 180  
CACTTTGCTT AACTTGATA AGTACTTTTT ACTGTTAAT AAATATTTTA TTAGAAA 237

5 SEQ ID NO:2371  
SEQUENCE LENGTH:236  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02735  
10 SEQUENCE DESCRIPTION:  
GATCAAAAGA GCAAACAATA CTTTCTATGG CTTATCAGCA GGAGTGTTA CCAAAGACAT 60  
TGATAAANCC ATAACAATCT CCTCTGCTCT GCAGGCAGGA ACANTNTGGG NGAATTGCTA 120  
TGGCGTGGTA AGTNCCAGT GCCCCTTTGG TGGATTCAAG ATGTCTGGAA ATGGNAGAGA 180  
15 ACTGGGAGAG TACGGTTTCC ATGAATATAC AGNGGTCAA ACAGTCACAG TGAAAN 236

SEQ ID NO:2372  
SEQUENCE LENGTH:236  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear  
CLONE:HUMGS02736  
SEQUENCE DESCRIPTION:  
GATCCNATTC CCGTTGCCTC AAAGCACCAG CTCTCTCGCT CCATCCTCCC AAGAGCCTCC 60  
25 AAGCGCCCAT TGGCTTCCTG GGACTCTGAG TCTGCCGGCC TCTTTCCCTG ACTCCAGTTT 120  
CTTCTGGCCT GAGCCAATGG GGCATGTTCT GTGACTGCAT TTGCATCTCG GATTGTGTTT 180  
TTAAACCCAT TTTCTCCCAT ATTTGCCTGA AAAATATATA GAAACTGATA TACAAA 236

SEQ ID NO:2373  
30 SEQUENCE LENGTH:245  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02737  
SEQUENCE DESCRIPTION:  
35 GATCAGGCTG GTACAGGATG CCTTAAGGTG ATGAGAGGTG AGGGTGCATG AAGAATAATG 60  
AGCACAGGGA AGAGAGAAGC AGGACAAAGT AGCAGATAAA ATGCCGGCAA AGCACAGATG 120  
ANTGTTTTCA AGAAGCTCTT GTATTTNTNT GCACAGTGTA AATATCCTTG CTATTTCAAG 180  
ATGGCGGCTG GCCTGCTCAG TAACATACAT GTTCAAATA AAGATTTTGC ATGAAAGTAC 240  
40 CTAAA 245

SEQ ID NO:2374  
SEQUENCE LENGTH:231  
45 SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02738  
SEQUENCE DESCRIPTION:  
GATCTGACTG COTCCTTTCT CTGGCCTCTN CCCCCTNCCC TCTTCTCTT AGCTAGGCTA 60  
50 GCTGTTTGG AGTAGAATGG CAACTAATTC TAATTTAAT TTATTAAATA TTTGGGGTTT 120

55

EP 0 679 716 A1

TGTTTTTAA GCCAGAATTA CGGCTAGCAC CTAGCATTTC AGCAGAGGGA CCATTTTGA 180  
 CCAAAATGTA CTGTTAATGG GTTTTTTTTT AAAATTAAAN GATTAAATAA A 231

5 SEQ ID NO:2375  
 SEQUENCE LENGTH:236  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02739  
 10 SEQUENCE DESCRIPTION:  
 GATCCACTGT GAGCACCAAC CTGCTGCAGT CTCTGGGCC CCTGCTGGCA GCTCTGCCAC 60  
 GTCACCGNCT GCCTGGCTCC CACACAGCCA TGCATTGTCA CTCTGCCTCC GGGACCCNAG 120  
 CTNNGGAGCN NNTGGGTCTG CCAGGTCCCA CCTCCTCTGT CCCCNA TGCC ACAACCTGGG 180  
 15 CTCCTGGCTA CAGCAGGGNT CCAGGGACTN CAAATAAATG TTCAGTGACT GGCAAA 236

SEQ ID NO:2376  
 SEQUENCE LENGTH:235  
 SEQUENCE TYPE:nucleic acid  
 20 TOPOLOGY:linear  
 CLONE:HUMGS02740  
 SEQUENCE DESCRIPTION:  
 GATCGGTCAC ACAAGCTGTT CCACGATAAT TTTGTNTCA NAAGGGGAGN CTGACTACCA 60  
 25 GGACCACTGG CCCCACTTCC AGCCCCTCCA TTCTNAGTAC ACTTCAGAGG GCTCTGGCAG 120  
 GGTGAGGGGG TCTGNCCGT GCCACAGAGA GTAAAGGTCT AGCACACCCA TTGTGGAGAT 180  
 ATTTATGGG GACANCCAG TGACTTCACT TTGAAGTAAA GTGGGATTTT CCAAA 235

SEQ ID NO:2377  
 30 SEQUENCE LENGTH:253  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02741  
 35 SEQUENCE DESCRIPTION:  
 GATCGNAGGC TACCCTGGCT CAGTNACCAG CTGCTCACTG TGTCTTCTG TGGTCTCAGG 60  
 AGCTGCAGTT GTTGCTGTTG TATGAATAGA CGATAGTNAA TTAGACTGGA TGTGTCTGTA 120  
 CTGGCAGTNA TTTTCCAACT NCCTCTGTAT AAGCAATACA TTTGTAAATC ATGGGAATGT 180  
 ATTTAATGGT AATTGCCTGT GGTGTTGTA TCATGATTTA NTNNTATNAT GAGCTTTTGG 240  
 40 CTTTNTNTAT NTN 253

SEQ ID NO:2378  
 SEQUENCE LENGTH:232  
 45 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02742  
 SEQUENCE DESCRIPTION:  
 GATCTGGGGT CCCAGTGTCA TTGGTGAAGG CCTTGGGATT CGAGGCAGCT GAGTCCTCAC 60  
 50 TGACCAAGGA TGCCCTTGTG CTTACTCCAG CCTCCTTGTG GAAACCCAGC TCTCCTGTCT 120

55

CCCAGTGAAG ACTTGGATGG CAGCCATCAG GGAAGGCTGG GTCCAGCTG GGAGTATGGG 180  
TGTGAGCTCT ATAGACCATC CCTCTCTGCA ATCAATAAAC ACTTGCCTGA AA 232

5 SEQ ID NO:2379  
SEQUENCE LENGTH:232  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02743

10 SEQUENCE DESCRIPTION:  
GATCTCTGAA AAGNAGGTTT CAGCCACGAG GCAGCTGNTC CCAGGACACT GAGGCCAAGA 60  
GAAATGTAAC AGAGCCACAG CTCCACAGGC CTGCACTCGG AGTCTGGGGC CTCTGCAGAG 120  
CCAGCAAGGG GAAAAGTATA ATCTGGGGGA CCTTCAACCA CTAAGCCTCT TGTGAGAGCC 180  
15 CTCAGGCAGG CAGATGTGTC ACCCAAATAA ACAGTGATAT TGTCTCCAGA AA 232

SEQ ID NO:2380  
SEQUENCE LENGTH:232  
SEQUENCE TYPE:nucleic acid  
20 TOPOLOGY:linear  
CLONE:HUMGS02744  
SEQUENCE DESCRIPTION:  
GATCTNAGCT GGACAGAGGA GGAGGAAGAG GAGGAAGCAA TGGGGGAATA GTGACACCAG 60  
ACAGTTGATG TCTAGATAGG ACCTCAATNA TTCCNTTAGA ATCTNAGATA CCAGGATATT 120  
25 GTTGGCCATG TGGCATCATT GAGCAGCAGG AGGCTGAAGG AGGNGAGAAC AAAATTGTCC 180  
AAACCATGCT GTTTTTTCC CTAAATAAA TCTTGATTTC TTCAGTTCA AA 232

SEQ ID NO:2381  
30 SEQUENCE LENGTH:236  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02745  
SEQUENCE DESCRIPTION:  
35 GATCTANGGA ACCAAACGGA AGGTTTTGAG GTGATGTAGG TCTTTCACAG TTAGCTTTGG 60  
GGAATACAGA ATACTCAAAT AAAGTGCTTT GTTATTATT CAGAGGGAAT GGCATTGAA 120  
ATGTTACAAC AGAGATTTCT TGGTGGTAGC TATTTNGGTA AAGGGTATAT GGNTATTTTT 180  
CTGTACATGT GAAATTATAT AGANNTAAAA GTTATATANA TTACATTGGC CAGAAA 236  
40

SEQ ID NO:2382  
SEQUENCE LENGTH:229  
SEQUENCE TYPE:nucleic acid  
45 TOPOLOGY:linear  
CLONE:HUMGS02746  
SEQUENCE DESCRIPTION:  
GATCAAGTTT AAGTCAGTCA GTTAAGGGGA GGAGAAGGAG AGGTTATACN TTCAGGGGGC 60  
TACCAGACAG TGTTCTCAAC TTGGTTAAGG AGGAAGAAAA CCCAGTCAAT GAAATTCAAT 120  
50 GAAATTCTTG GAAACTTCCA TTAAGTGTGT AGATTGAGCA GGTAGTAATT GCATGCAGTT 180

55



TGTACATTAG TGCATTAAAA GATGAATTAT TGAGTNCCTA AAGATTAAA 229

SEQ ID NO:2383

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02747

SEQUENCE DESCRIPTION:

GATCTGATTT CAGATTTTTC CTGTATCTTT TTTACATACA TCAGAAAAAG AAATGTTTAC 60  
TATATTTTTC GTTCCATTNA TGATTGTTT AAGCATTGA CGNATAAGGA AACTAACAA 120  
TTAANTCAAT TAGAAAAAGCA ACATAAAATT AANTGATATT TAGGAAATCA GTTATATGTG 180  
AGCTTGGGTA TTCAAATGTC ACAANTAAAA GGCNTANACC CATNAAA 227

SEQ ID NO:2384

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02749

SEQUENCE DESCRIPTION:

GATCAAAATNA CCTGTGAAGG AATATTTTGC CTTCATCCTA GCTGCTGGGG AAGCGGGGAG 60  
AGGGGTCAGG NAGGCTAATG GTTGCTTTCC TGAATGTTTC TGGGGTACCA ATACGAGTNC 120  
CCATAGGGNC TGCTCCCTCA AAAAGGGAGG GGACAGATGG GNAGCTTTTN TNACCTATTC 180  
AAGGAATACG TGCCTTTTCC TTAAANNCTT TCATTGATTG AAA 223

SEQ ID NO:2385

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02750

SEQUENCE DESCRIPTION:

GATCAGGGTT TNGGGTCTGT GTTCTTTCTA CCGTCAGCAC CTGTGTGGTC AATTCTGGAC 60  
ACTTCCAGAG GAAGTCTTTG AGTAGAGAAT CCTACTCAA TTTCACTGTA TATNTTAAGC 120  
ATTCCTCTCC TNTCCNTTG CCTNCCCTGT TGCCTTNTCT TCCCCTGATT TCTCCTCTGG 180  
TCATCTNCTC TCCCTNCTGC GTGTAAGCCA TGGGAAAGGG N 221

SEQ ID NO:2386

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02751

SEQUENCE DESCRIPTION:

GATCATGAAA ACAATGTAGG TAAAGTAAAG TATGTATTTG TCTGTGCTTG AAAAAATATTG 60  
TAAAATGTTA TGTATTTGGA ATATATTTTG TGGTTTGTCT AATATTTATA AACACAACCTC 120  
GGGGTGAATT CACANTGAGT TTATTTCAAT GAAATACTAG AGATATGGGG GCCATGTTAC 180  
TGTGCTTGGN GCCTTACCNT TTGTATAGTG AAATTTGCAN 220

SEQ ID NO:2387

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02752

SEQUENCE DESCRIPTION:

GATCCGCCTG CTTGGCCTC CCGAAGTGCT GGAATTACAG GCATGAGCCA CTGCTCCTGG 60  
 CCTAAGATGT TTTTAAATA ATGTTTTTAA CTAAATTTA AGAATGTTT TAACTAAAGT 120  
 TATTTATATT TGAATAATT CGTTAATGAT TTGTGTCATT TCCCAACCC CTTTTAAAT 180  
 TTGTGAATTT GAGGACTGGA TTTAAAGATA AAAAGTTAAA 220

SEQ ID NO:2388

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02753

SEQUENCE DESCRIPTION:

GATCTAATTA ATAGCTGACC TCCCAAATCT GACAGGATAG AACTGCCAC GTGCAAGGCC 60  
 TGCCAGCCCC TCAGACGCAC AAAATGCGTA AAACAAATGC ATCCTTTCCT GGCTAAGCGA 120  
 GTATTACTCT CTTAGCCCTG CACCAAACCT CCAATCTAGC CACATTTAAC TTTTCATTTC 180  
 TTAGACCCGC AGAGTGTCTT CCTGCCTCTG AGCTGTGAGT GTTGTTCCTT TTGCCGGGA 240  
 TGCTCTTGTT TTTAATACCA GTTCAAGTCC CACTCTCTCA GTGAAGCACT CCCTTCCCCA 300  
 CTNATAGCCT TTAGTGAACC CTCGTTTCTT GCTTCTTN 339

SEQ ID NO:2389

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02754

SEQUENCE DESCRIPTION:

GATCCATGTG CAGTAATGCC TGGTGGCTCC AGGTCTGCCC CGCCGTCCTG TGGGGCTGTG 60  
 AGCTTTCCTA GCCTCCTGCC CGTGTTTG TGATATCATTG TGCTCTCAGC TGCATTTC 120  
 GCCCAGGCTG TTTGGCGCTG CCCAGGAATG GTATNAATTC CCCTGTTTCT CTGTAGCCA 180  
 GTTACTAGAA TAAATCATC TACTTTAAAA TCTTTCAA 219

SEQ ID NO:2390

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02755

SEQUENCE DESCRIPTION:

GATCTTGACC GGGAAAAGG ACTTGAGAGA ACCTTCTAGG ATAATTNAT TTCTTGATTA 60  
 GGTGGTGGTT ACATTTGTAA AAATCATCGA CCTCTAAAT TAGGGTTTGT GCCCTTCACA 120  
 TACCTTGTTG TATGCATTTT GCCACTTGT TTTTCAAGC AATGAAAAAG TATCACTGCA 180

ATTAGGTTTT AAATAAATTT GTTCGTAA CATGTCAA

219

SEQ ID NO:2391

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02756

SEQUENCE DESCRIPTION:

GATCTGGAAT CGGGGTCAGC GGGGCTACAG TCCTTCCAGG GGCTNTGGGG CAGCTCCCAG 60  
 CCTCTTCCCA TGCTGGTGGC CACCGTGTCC CTTGCTGCGG CTGCATCTTC CAGTCTCTCC 120  
 TCCGTCTTCC AGTGGCCGCT CTCTTTATAA GAACCCTGGT CATTGAATTT AAGGCCACC 180  
 CCAAGTCCAG AATGACCTCG CAAGACCCTT AACTCAA 218

SEQ ID NO:2392

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02758

SEQUENCE DESCRIPTION:

GATCCATTTT TAATGGTTCA TTTCCTTTAT GGTCATATAA CTGCACAGCT GAAGATGAAA 60  
 GGGGAAAATA AATGAAAATT TTACTTTTCG ATGCCAATGA TACATTGCAC TAAACTGATG 120  
 GAAGAAGTTA TCCAAAGTAC TGTATAACAT CTTGTTTATT ATTTAATGTT TTCTAAAATA 180  
 AAAAATGTTA GTGGTTTTC AAATGGCCTA ATAAAN 217

SEQ ID NO:2393

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02760

SEQUENCE DESCRIPTION:

GATCAGAGGA ACTTTNAGGT GTCTGCCGGC TAACATTGTG TCATTCTGG AGTCCACAGT 60  
 ACACGTCCCC TGCCTCAACA GGCACAGCTC TCACAAAGCT CTTCAAGCAT GGAAGTGGGA 120  
 GTTGTGTTGT ACTTCATGGC ACTCTGATGC CTGCTGTCTC AGTGTGTTGGT TATTATGCAA 180  
 ACAAGTAATG TTTGAAATAT ATAATAGCAC TGGAAA 216

SEQ ID NO:2394

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02761

SEQUENCE DESCRIPTION:

GATCCATTTT TACCTGCATT TCCCAGAGGA CTAGCAGGAG GCAGCCTTGA GAAACCGGCA 60  
 GTTCCCAAGC CAGCGCCTGG CTGTTCTCTC ATTGTCAGT CCCTCTCCCC AACCTCTCCT 120  
 CTAACCCACT AGAGATTGCC TGTGNCCTGC CTCTTGCCCTC TTGTAGAATG CAGCTCTGGC 180  
 CCTCAATAAA TACTTCCTGC ATTCNCTGN NAAA 215

SEQ ID NO:2395

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02762

SEQUENCE DESCRIPTION:

GATCTAAATG TAAAAGCAAA TGAAAAATGC ATGTNTTTTT NCCTGTCAAA CATGTATACC 60  
 CTTATGTATA GAGACCAGTA GTCACGTATG GTGACTGAAA CAGGATTATG TAATCCCTAA 120  
 AAAGCAGAAT ATGTAAAANT CACATGTATG CGTTTGGTTT AGGAATGTNC TTTGTACTT 180  
 CCACTTGAAT AAAGGTGTGT TTGGTATTCT GAAA 214

SEQ ID NO:2396

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02764

SEQUENCE DESCRIPTION:

GATCCAGAAA TTCAAATTC GAGAGCAGAT GGAACGACAT CTAAATCTNT GAATAAAGCA 60  
 GCAGGCCTGT CCTGGCCGGT TGGCTTGACT CTCTCCTGTC AGAATGCAAC CTGGCTTTAT 120  
 GCACCTAGAT GTCCCCAGCA CCCAGTTCCTG AGCCAGGCAC ATCAAATGTC AAGGAATTGA 180  
 CTGAACGAAC TAAGAGCTCC TGGATGGGTC CN 212

SEQ ID NO:2397

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02765

SEQUENCE DESCRIPTION:

GATCTATTAA AGTGTCAACT TTGCATTATA GAACTGAACA TGAAGTAAAT TGAGTGTTC 60  
 TGAGTTTNC ATAGAAAATT TATGCTACCT CTCATCTTT CACATACAAA TAAGCAACTT 120  
 TTAATGAAGG CTTAGGGTGN AAATTTTAAT TTAGCACTT TACATTACAT GATGAATGGT 180  
 GAATATTAAG GACTTTGAA CATTTTAATA AA 212

SEQ ID NO:2398

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02767

SEQUENCE DESCRIPTION:

GATCGAGAAG CTGCTCAATT ATGCACCCCT GGAGAAGTGA CCACGCTGAA ACCCACCAC 60  
 CCGCTGTGCT GACCATGGGC CCTGAGCGTC CTACCCGAA TTCACGAGGC TGAGGCATCC 120  
 GGGAGCTGGC GTAATGCCTG GCCGCAGTGT GTGTGTATCC CATACCCAC TCTGGAAGGA 180  
 ACCATCCAGT AAAGTCTTT CAGAACCACT AAA 213

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SEQ ID NO:2399

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02768

SEQUENCE DESCRIPTION:

GATCAGAGAT GCACCACCAA GCCAAGGGAA CCTGTGTCCG GTATTCGATA CTGCGACTTT 60  
CTGCCTGGAG TGTATGACTG CACATGACTC GGGGGTGGGG AAAGGGGTCG GCTGACCATG 120  
CTCATCTGCT GGTCCGTGGG ACGGTGCCCC AAGCCAGAGG CTGGGTTTCAT TTGTGTAACG 180  
ACAATAAACG GTACTTGTCA TTTCGGGCAA A 211

SEQ ID NO:2400

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02769

SEQUENCE DESCRIPTION:

GATCAGACAC CCCTTCACGT GTATCCCCAC ACAAATGCAA GCTCACCAAG GTCCCTCTC 60  
AGTCCCTTC CCTACACCT GACCTGCCCC CTGCCGNACA CCCACCCAGA GCACGCCACC 120  
CGCCATGGGA GTGTGCTCAG GAGTCGCGGG CAGCGTGGAC ATCTGTCCCA GAGGGGGCAG 180  
AATCTCCAAT AGAGGACTGA GNACTGCTAA A 211

SEQ ID NO:2401

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02770

SEQUENCE DESCRIPTION:

GATCACCTAC TTACTGTATT CTACATTATT ATATGNCATA GTATAATGAG ACAATATCAA 60  
AAGTAAACAT GTAATGACAA TACATACTAA CATTCTTGTA GGAGTGGTTA GAGAAGCTGA 120  
TGCCTNGNTT CTACATTCTG TCATTAGCTA TTATCNTCTA ACGGTTTCAGT GTATCCTTAC 180  
AGGAATAAAA GCAGCATNTG GNTAAA 206

SEQ ID NO:2402

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02771

SEQUENCE DESCRIPTION:

GATCGAATGA AGGATTCAAA ATTAACCACT CCAAGGGGGG ATTGAAGGAA GAACCACTCT 60  
TAATGGACAA AAAGAAAGAA AGGGGAGGGA GTAACAGGGA TATNAGCTCT AGCCGCCCAA 120  
GCTAGCAATG GCAACCCTTC TGGGTCCCCT TCCAGCATGT GGAAGCTTTC CTTTCGCTTC 180  
ATTCAATAAA CAGCTGCTGC TCAAA 205

SEQ ID NO:2403

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02772

SEQUENCE DESCRIPTION:

GATCTATAGA CATNAGGAAG GGAGTNAGAC GGCTCCTCCA CCATCCTCAG CCAGTGCAAC 60  
 CCATTCCCTC TNCCTCTCTC TCTCTCTCTC TCTCTCCCTC CCTCTCCTTC CCTACCCTCT 120  
 CACCATCTTT NTTGGCCTCT CTNAGGGTCT CTCTGTGCAT CTNTTTAGGA ATCTNGCTCT 180  
 CACTCTCTAC GTAGCCACTC TCCTTCCCCN ATTTNTGNGT CCACCCNN 228

SEQ ID NO:2404

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02773

SEQUENCE DESCRIPTION:

GATCTAGCTA GGGCTTTTGC TNTTCATCTT TGTGCATAAC TTACCTGTGA CCAGTATAGG 60  
 TGGGATATAC ATNTATCTTG CAGGAAATTC CCCAAAGCTC AGAGTCCAGT TCCTTCCATA 120  
 AAACAGGCTG GACAAATGAC CACTATGTGA GACCCCCCGG NTCGACTTCA GGGGTCACTG 180  
 TTCCTGTCCC AAACCCNCAC ACAGAATNCT CTGNCTGNGG TTCATGTNGA AACTGAGCAA 240  
 AAACTANAGT ATCTNTCAAN ANGTGTAACN TGN 273

SEQ ID NO:2405

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02774

SEQUENCE DESCRIPTION:

GATCCACCTC ATATGTGAGT CCGTCCAAAA GATGTTACTG CTCTGGGTGG GCCAGTGTTT 60  
 TATATCGGTT ATACTAACTT TCATTTAAAG TATTTATTCT AAAATGCCTC TGAGAAACAG 120  
 TAAAAAATAA AAACAACAAG TTGTCTAAAA TGCAACAGCT TTTATAGTAA ATGTACATTT 180  
 ATAAATAAAA TACTCAAATC AAA 203

SEQ ID NO:2406

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02775

SEQUENCE DESCRIPTION:

GATCTCTGAT GGATTTGTTG ACTCCTCTGT GGGAGAAAGG CTTGGTCTAC TGCAGGTGTT 60  
 AACGCTAAGC CAGGCTGGAG CTGCGGACGT NAGTTTCCTC AGCNCCCCGC TGTTGCTTC 120  
 GAACGTNACC TCGACGTCTG CTCTCCCTT CCCTTTAGCT GACAATGTGA CAGTNCTTGA 180  
 ATAAAAGTNA GTCTGACAGG AAA 203

SEQ ID NO:2407

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02776

SEQUENCE DESCRIPTION:

GATCTGAATG TGAATTCTA ATTGTATCAG ACGTTAATGT TTTAAAGCTA TAACAAAGTT 60  
TAAAATTTCT ACTTTTGT TTTNATTAT TTTAACTGTT CTTTATCTA TTAAATTGTT 120  
GTATGTGGAT GGGGAAGTTT TGTTCCTCCT CTTAGCATTG GTTCTATAA CCAGAAATAA 180  
AATTCTATAT TAAAGAAATG ACAA 205

SEQ ID NO:2408

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02777

SEQUENCE DESCRIPTION:

GATCCCAATC TGAGAAAAGG CAAAAGAATG GCTACTTTTT TCTATGCTGG NGTATTTTCT 60  
AATAATCCTG CTTGACCCTT ATCTGACCTC TTTGGAACT ATAACATAGC TGTCACAGTA 120  
TAGTCACAAT CCACAAATGA TGCAGGTGCA AATGGTTTAT AGCCCTGTGA AGTTCTTAAA 180  
GTTTAGAGGC TAACTTACAG N 201

SEQ ID NO:2409

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02778

SEQUENCE DESCRIPTION:

GATCTTTAAC TGCCTGCTGA TAAGATATTG GGCCAACCTGA AAATAGAAAT TGTCTTTTCT 60  
TAGAAATATT TTAATGCTAA CTTGTTAGTT TTCCTCAGAA AGCTAGTATT TGAAGCCATT 120  
CGAGTTTAAAG ATNCTCTAAT TTCAATAAAA TAGCTTCCAA ATATTTAAAA TGTAATAAAA 180  
TATATGTTTG ACACTCTAAA 200

SEQ ID NO:2410

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02779

SEQUENCE DESCRIPTION:

GATCAAAACG CTCCATCTTT TTACAGTGGC ATAGGAAGAC GGCAAAAATT TCCTAAAGTG 60  
CAATAGATTT TCAAGTGAT TGTGCCTTGT TCTAAACTT TTATTAAGTA GGTGCACTTG 120  
ACAGTATTGA GGTCAANNNN TATGGTGCTA TTCANTNAG TCTAGGTTTA GGCCCTTGTA 180  
CATNTTGCCC ATAACNN 198

SEQ ID NO:2411

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02780

SEQUENCE DESCRIPTION:

GATCTGCCCCA TTGCTGAAAC TTCAGTACTT AAGTCCCCTA TTATNATTGT ATGGCAATCT 60  
 ATCTGTCCAC TCAGAAGTTA TTATATTTGT TTTATATGAT TGAGCACTTC TGT TTTGGGT 120  
 ATATATGTAT TTACAATNAC TATAACCTCT TGCTGAATTA ACCCCTNTTA CCATTATGTA 180  
 ATAAACTTAT TTCCCAA 198

SEQ ID NO:2412

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02781

SEQUENCE DESCRIPTION:

GATCTTGAAT CACTTGACAG TGTTTGTTNG AATTGTGTTN GTTTTTNCCT TTGATGGGCT 60  
 TAAAAGAAAT NATCCAAAGG GAGAAAGAGC AGTATGCCAC TTCTTAAAC AGAACAAAAC 120  
 AAAAAAGAA AATTGGGCTC TTTCTAATC CAAAGGGTAT ATTTNCAGCA TGCTTGACTT 180  
 TACCAATNCT GATGACAN 198

SEQ ID NO:2413

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02782

SEQUENCE DESCRIPTION:

GATCCAAAGT AACTAAACAG GAGCCACAA GACGGTCTGC CAGATTGTCA GCGAAACCTG 60  
 CTCCACAAA ACCTGAACCC AAACCAAGAA AAACATCTGC TAAGAAAGAA CCTGGAGCAA 120  
 AGATTAGCAG AGGTGCTAAA GGAAGAAGG AGGAAAAGCA GGAAGCTGGA AAGGANGGCA 180  
 CAGAAAAC TG NTTCTGTAGA TAACGTGGGA GAATGANTTG TCATGAAAAT TTGGTGGTTG 240  
 ATTTTTTTGT NTGCTTGGG ACAACTTTTA AANGCTATTT TTNCCANGTN TTTTNGTNN 300  
 TTGGTTTTTT TTTTAGGGNT CTNCTTGTG GCATNCGGNA GTTTTTTANG GTTGGNCN 359

SEQ ID NO:2414

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02783

SEQUENCE DESCRIPTION:

GATCCCAGGG GTGCACATGG GCCCCTTGGG TGTCTGAACA GAAGGGCATG GNAGGAAGGG 60  
 CTGCACCCCT GCAGTCTTAC TCTGCTGGTG TAGCGGGCAG CTGCCCCTC CCACCCACCC 120  
 CTGCACCGCG GGCTCCTNAG TCGGCAGATT AAGCATTNA TAAATTGTAT TTTAAATACA 180  
 TGTTTTAAAC TTGTCAA 198

SEQ ID NO:2415



SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02785

SEQUENCE DESCRIPTION:

GATCCCATCC ATCAGCTCCC TTTTCTTTT CCCTTGAAC GTTCTGGCCT CAGACCAACT 60  
CTCTCCNNNN NTAACTCTC TCCTGTATAA CCCACCTTG CCAAGCTTC TTCTACAACC 120  
AGAGCCCCC ACAATGATGA TTAACACCT GACACATCTT GCANAAA 167

SEQ ID NO:2416

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02786

SEQUENCE DESCRIPTION:

GATCTGTGAT TGGNTGGTTA ATGGGAAACG GTTTTTNCT TTGGCTGCAG GTGTTCTGCT 60  
GATATCAACA GCTTCCTAT TTTNAATGCA GAAACAGGG TCTGGACAT TAGTCGTTAT 120  
ATTNACTTG AAAAGAAAGA AACCAAGTGC GCTTGCAAT ATTTATTACA CAAAGAACTT 180  
GCTGCTGCAT TCTAAA 196

SEQ ID NO:2417

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02787

SEQUENCE DESCRIPTION:

GATCACAGAT TTCCTGCCA GGGTGTCTGT GGTATCAGC TGCAGGCTCA GCTNGGGTCG 60  
GCCGNTTAC ACAAGCCACT CTGTACCAG TGCCTACCT TAGTGACGGG AGTAAGGAGC 120  
TTCCTTCCCC TCCATGTCAT TCCTNCCTGT TCCNTNCATT CCCCAACAGC AAATAAACT 180  
GTTGAATGCT CAAA 194

SEQ ID NO:2418

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02788

SEQUENCE DESCRIPTION:

GATCTTCCTA CGCACACAC AACGTCAGT TAATGTTCCA TCCATGCTGC TTAAAGAGCA 60  
TTCCTGTCCT AGTAAATGG GCAAGTCCCT CTACCCCCA CCCTCACCTG GTATGCTTAC 120  
ATTAATAGCT AAAGTCAATC CTGTAATGAA ATAAAGCAAG TGGTAGCTGT CTGGTAGCCT 180  
CCACTACTGC AAA 193

SEQ ID NO:2419

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS02789

SEQUENCE DESCRIPTION:

GATCAAAACC CAGCAGAGTG CAAGCAGCAG TGAAGCAGGA TGTATGTGGA CTTGAGGATA 60  
ACCTGCACTG GTCTACCTTC TGCTTCCTG GAAAGGATGA ATTTACATCA TTTGACAAGC 120  
CTATTTTCAA GTTATTTGTT GTTGTGTTGC TTGTTTTNT TTTGTCAGCT AAAATAAAAA 180  
TTCAAATAC AAA 193

SEQ ID NO:2420

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02790

SEQUENCE DESCRIPTION:

GATCAGACCT CAATAATTTT ATACTGTAAT AAGCTCTTG AATGTNTATA TTATTATTTT 60  
TNACAATCAT TTCATTTTGT ATTTAATATC AATGGACTGA GTCTGATTCA GAAAATAATT 120  
GTAATGTTCA TATTCAATAT CTTACAGTGA TACAGTTTG TATTACATA TAAATATACC 180  
GACATGACCA AA 192

SEQ ID NO:2421

SEQUENCE LENGTH:276

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02791

SEQUENCE DESCRIPTION:

GATCAGGGTT TCAAGAATGA CTGCAGTGGG TTTGGAAAC AGACTTATCA TTATTGATTT 60  
GAGGTTTCCC AGAGATATAG TTCACAGTTA ATTGTTGGGC TCTAATACAA CTGACCATTT 120  
AAAATTGAAC AAGTTTATTG TTTGTAACA ATGTCAGTTG TTAACCTTG NCATTTCAT 180  
TAAACATGA NTGTAGTTA TAACTCANTG CAANTNCAAC AGTTGTATTT GGNGTTAANT 240  
TATTTTCACA CGTNNCTTN TTTTCATGGAN NNCCCN 276

SEQ ID NO:2422

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02792

SEQUENCE DESCRIPTION:

GATCTTTTAT TTTCTCATTA TTTATACTT CAGACTTGGG CCCCTGTTT TTTCTTCCC 60  
ATTAACCTGA GTGACCTGTG TGAGAGACAG ACAGATGCC CACGAGGATG GCTGGACAAG 120  
GACTTTTACT TTTTATTACA TAAAAATATT AAAAAATAAA TAAAAAAAT AAAATTTTAA 180  
ACTAACTTAA A 191

SEQ ID NO:2423

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear  
 CLONE:HUMGS02793  
 SEQUENCE DESCRIPTION:  
 5 GATCGGAATG CGGGGTCGAG AGCTGATGGG CGGCATTGGG AAAACCATGA TGCAGAGTGG 60  
 CGGCACCTTT GGCACATTCA TGGCCATTGG GATGGGCATC CGATGCTAAC CATGGTTGCC 120  
 AACTACATCT GTCCCTNCCC ATCAATCCCA GCCCATGTAC TAATAAAAGA AAGTCTTTGA 180  
 GTAGTCAAA 189  
 10  
 SEQ ID NO:2424  
 SEQUENCE LENGTH:187  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS02794  
 SEQUENCE DESCRIPTION:  
 GATCGAGACC ATCCTGGCTA AAACGCCTGG AATGCAGTGG CACAATCACT GCTCACTGCA 60  
 GCCTTGACCG TNTGGACTCA AGTAATTCTC CTACTTCAAC CTCCCAAGTA GCTGGGACTA 120  
 CAGTCATGCA CCATCATGCC TATAAGATA ATTTAATTTA TAATAAATNA TTTATACAAA 180  
 20 CAATAAA 187  
 SEQ ID NO:2425  
 SEQUENCE LENGTH:187  
 25 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02795  
 SEQUENCE DESCRIPTION:  
 GATCAATCGT GCATCCTNAG TGAACCTCTG TTGTCCTCAA GCATGGTCTN NNTACTTGTG 60  
 30 AACTATGGTG TTCAGTTTGG CCTCTGTTAG AAATTCACAC TGTGTTGTA ATNATGTGGA 120  
 ACTCCTCTAA AANTTACAGT ATTGTCTGTG AAGGTATCTA TACTAATAAA AAAGCATGTG 180  
 TAGNAAA 187  
 35  
 SEQ ID NO:2426  
 SEQUENCE LENGTH:185  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 40 CLONE:HUMGS02796  
 SEQUENCE DESCRIPTION:  
 GATCNCGTTT TNAACCCGNT CCTGCCCCAC CTGCCCTATA GTTATGGCCT GTGTTCTGCT 60  
 CTCCTGGTCC CAGTGCACCG TCTGCTCTGT GAACTCCTCC CACCAGGCCC TTCTTACCCC 120  
 ACGCGTGTCT GTCCCCNTCG TTCTGTAGCG GNGGTACAT AATAAAACAA TGGNGTGGNG 180  
 45 ACAAA 185  
 SEQ ID NO:2427  
 SEQUENCE LENGTH:181  
 SEQUENCE TYPE:nucleic acid  
 50 TOPOLOGY:linear  
 55

CLONE:HUMGS02797

SEQUENCE DESCRIPTION:

5 GATCTATGTT TTCTGAAAAT AATGGTTAA TGGAAATTAT CTAATATATT TNAACTGTTC 60  
 CTGTTAAAAA CAATAGGCTT CAAGATGACA TAACACCAAA TCAAAAATNA CCAAAGGAAT 120  
 CATTITGTTT GTTAGATTG TAATTTAGCA TCATTGGCAA TAAATCTACT CAAACGTTAA 180  
 A 181

SEQ ID NO:2428

10 SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02798

SEQUENCE DESCRIPTION:

15 GATCCCAAAG GGGTTGGAGG CAGGGAATAT TTGAAAATTC AGACTGGAAT TCCAGGCCAA 60  
 AAGCTCAAGA CCACCAGCCT CTCCTCCTGC CTGGAAAAAT AAGCCTTGT GAAAGACTGA 120  
 TTTACCATGT ACAATTGTGA TTGTGAACGT TGTGAGTAA ACCTCCAGAC TTTCTCTAAA 180

20 SEQ ID NO:2429

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02799

SEQUENCE DESCRIPTION:

25 GATCATAAGT NAAAAATGTA TTTAATATAC CTAACCTACC AAACATCATA GCTTAGCCTA 60  
 GCCTGCCTTA AACATGCTCA GAACACTTAC ATTAGCCTAC AGTGGGCAA ACTATCCAAC 120  
 AAAAAATCTA TATTGTAATA AAGTTATAAA GANTTTTGAA TAAAANTTCA ATATTTGANG 180  
 30 TACAAA 186

SEQ ID NO:2430

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02800

SEQUENCE DESCRIPTION:

40 GATCTGGTGG AGGGAAGTGA AGATGAAGGC CTCTCAGGCA CCATGGATGG NATGGGTGTG 60  
 TGTNAAGGGG GCAGGGTCCC CAGGAGCTGC CCCAGGTCTG GCTNGACAGT TGCACGGNAA 120  
 GTCCTGTTG TAAACTCAAC GTTCCACGN CTTTCCATT AAACTTTACC CCAAATCAAA 180

SEQ ID NO:2431

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02801

SEQUENCE DESCRIPTION:

50 GATCTATTTT TCCTAAAACA TTCCCTCCC CACTCCTCTC CCACAGAGTG CTNNNTGTT 60

55

CCAGGCCCTC CAGTGGGCTG ATGCTGGGAC CCTTAGGATG GGGCTCCCAG CTCCTTTCTC 120  
CTGTGAATNG AGGCAGAGAC CTCCAATAAA GTGCCTTCTG GGCTTTNCT AACCTTTAAA 180

5 SEQ ID NO:2432  
SEQUENCE LENGTH:179  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS02802  
SEQUENCE DESCRIPTION:  
GATCTTCACC AATGGCAAGT GGAATGACAG GGCTTGTGGA GAAAAGCANN TTGTGGTCTG 60  
CGAGTTCTGA GCCAACTGGG GTGGGTGGGG CAGTGCTTGG CCCAGGAGTT TGGCCAGAAG 120  
TCAAGGCTTA GACCCTCATG CTGCCAATAT CCTAATAAAA AGGTGACCAT CTGTGCAAA 179

15 SEQ ID NO:2433  
SEQUENCE LENGTH:273  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS02803  
SEQUENCE DESCRIPTION:  
GATCTAAAA TTCAATGCAA ATATCTTTTA TTGGTAGTT TTGTCTACAT ATTNATGCT 60  
CTAGCATGTG CAATATATCT TTGTAAAGCA CGATGATACA AATCTGGTGC CAGTGTTATA 120  
25 TTTNGCATAA CATATTTGTA ACAGCATAAA ATATTGTTG ATGATTTCAG TGGGATTTTG 180  
TCTATAATGT TTTCTTATGT AAATNGGAGT TGAATGACTC TGGTAAATGT CATGACTGTA 240  
AAANTGGGGA AANTGACTTT NAGTTCAGTG AAN 273

30 SEQ ID NO:2434  
SEQUENCE LENGTH:178  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02804  
35 SEQUENCE DESCRIPTION:  
GATCCAAACT AATTTTACAT TAAAAAATA AGTTAACTA AACTTCTTTA CTGCTGATAT 60  
GTTTCCTGTA TTCTAGAAAA ATTTNACAC TTTCACATTA TTTTGTACA CTTTCCCAT 120  
GTAAAGGGAT GATGGCTTTT ATAAATNTGT ATTCATTAAA TGTTACTTTA AAAATAAA 178

40 SEQ ID NO:2435  
SEQUENCE LENGTH:176  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
45 CLONE:HUMGS02805  
SEQUENCE DESCRIPTION:  
GATCTAAAAA AAATATTGTT AAAAGCATT CCTCTAGGGA ATGGGATTTA GATTTAAAA 60  
GGGTGGGATG GGAACTGTG TTTTCATTT TAAGTCCTTC TGTACTANNT AATTTGTNAC 120  
50 CTTGTGCATG TATTACTTTG AAAAAATTTT TAATAAACCC AAATAAAANT CTAAA 176

55

SEQ ID NO:2436

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02806

SEQUENCE DESCRIPTION:

GATCANCCCT CAAGGGCACA TGCCAAGGGC AGAGCAGCCC ATNTAGACAG CTTCGNAGGG 60

CATGGGGGTG TAGGGAGTTC GGGGTAGCTC CTCATTAACT ATTTGTNGGN TGAGTAAAGG 120

GGTGAGGCTC AGTGGCAGGT ACCTCTNCAA TNACAAGCTG CCNCCCCTCT ATGTN 175

SEQ ID NO:2437

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02807

SEQUENCE DESCRIPTION:

GATCGGCAGC AAGAGTAAAG ACACAGCTCC AGAGGCCAC ACTGTGGGGT CTGGGCCCTG 60

CCTTAGGCAG CCCCCCTCTT TGGCCCCCTC CTGTCAGGCC CAGGGCTTGG AGTGAAAGTN 120

ACTCTCAGGT GGTGGGGTGG GGAATGTGAA TAAACATGAT TTCTTGCCGG GCAA 175

SEQ ID NO:2438

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02808

SEQUENCE DESCRIPTION:

GATCCCTTCA CTGGCCCCCT CGGGAGNCCT GGGTTGGACT CAGGGNCTCC NCCAGCTGGG 60

GNGGNGGACC GCAGCACCTA TCTGAGCAGT TAGAGCGTCT TTTTTCAG ATTGTGTACA 120

GTAGATTATT TATTTGTNA TTTTGAATA AAATTATTT TATGGCTTAG GAAA 174

SEQ ID NO:2439

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02809

SEQUENCE DESCRIPTION:

GATCTTGTCT GAAATGCTAG TTTCTGACTA CAAAACTAC AGGACATAGT AGATATGCTC 60

AGTAGAGCTG CTTAAATAA TTCCCTTTT TTTCTGTG AATTCTGTTA CAAAACCAGG 120

TCTGTGTTAT AATAGAAANC ACACTTATGA ATAAAAATCT TAAAAATTA AA 172

SEQ ID NO:2440

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02810

## SEQUENCE DESCRIPTION:

GATCAATGTC CCTGGTTACC TATGTGTTTG AATTATCTTC GTGTTACAGG TGTTTAATGA 60  
 TTTNCTCCT TCTAGCTTAT TTGTATTTC A CTGTTTTTC TTAAATNAA CATGGTTACA 120  
 CTNTGTTTCA GCAACTGTAT AAATTAAACA CAGATNATTA CTA CTGCTAA A 171

SEQ ID NO:2441

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02811

## SEQUENCE DESCRIPTION:

GATCGTAAAA TTTAAGCAC TAAAAATTTT TTCATAACCT TTCATAATAA AGTTTAATAA 60  
 TAGGTTTATT AACTGAATTT CATTAGTTTT TTTAAAGTGT TTTTGGTTTG TGTATATATA 120  
 CATATACAAA TACAACATTT ACAATAAATA AAATACTTGA AATTCTCAAA 170

SEQ ID NO:2442

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02812

## SEQUENCE DESCRIPTION:

GATCTACTTT GAATTCACA CTCTCATTAA TAAATTGANT AAAAGGGAAT ATTTTGGCAC 60  
 CTGATATAAT CTGCCAGGCT ATGTGACAGT AGGAAGGAAT GGTTCCTT AACANGCCCA 120  
 ATGCACCTGGT CTGACTTTAT AAATNATTTA ATAAATGAA CTATTATCAA ATAAACGTA 180  
 TGATTTCAGTC CTAAAA 196

SEQ ID NO:2443

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02813

## SEQUENCE DESCRIPTION:

GATCAAAATTT TTTTCTTGCA ATNATGTGAT GAGTTGCCAA ATAATTGANA TTATTTTAAA 60  
 ATGTTTTTGT CATATCTTG TTTTATAATT AAAATTTACA TTCAGTGTGT ATGGGTTTTT 120  
 TTTTNAATTT NACTCTTAAT GTAAGGTGGA TATTNCTGTN ATTTTACATG GTTCTTACT 180  
 GAGATTTTAT ATATAANTNA TAAAANGTTT ACCAAA 216

SEQ ID NO:2444

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02814

## SEQUENCE DESCRIPTION:

GATCGTTAAT GCCCTTGAAG TGGTTTTTGT GGGTGTGAAC AAATGGTGAG AATTTGAATT 60  
 GGTCCCTCCT ATNATAGTAT TGAAATAAAG TCTACTTAAT TTATCAAGTC ATGTTTCATGC 120

CCTGATTTTA TATACTTGTA TCTATCAATA AACATTGTGA TACTTGATGT AAA 173

SEQ ID NO:2445

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02815

SEQUENCE DESCRIPTION:

GATCAGCTCC GTGGGGCTGG TTTTGGTCCA CAGCATAACA GGCACCTGCCT CCTTACCTGT 60  
GAGGAATGCA AAATAAGCA TGGATTAAGT GAGAAGGGAG ACTCTCAGCC TTCAGCTTCC 120  
TAAATTCTGT GTCTGTGACT TTCGAAGTTT TTAAACCTC TGAATTGTGA CACATTTAAA 180  
ATTCAAGTG TACTTTAAAA TAAAATACTT CTAATGGAAC AAA 223

SEQ ID NO:2446

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02816

SEQUENCE DESCRIPTION:

GATCTGTCAC TTTGTATAAA AACAAGAAAC GATTAGTTCA TTAACTTTT TCTTTACCTT 60  
CTGGTAGTAA AAATAGATAA AATAATCCG TNTCAACTAC TGTGTGTAAG AAGCCTGTAT 120  
CATATGTAAC TGGGACTTTT GTAAATAAAT NTTTTGCGC TCTGCAAA 168

SEQ ID NO:2447

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02817

SEQUENCE DESCRIPTION:

GATCATAAAA TGTATCTTTT CCATGGCCAA CAAGGNGCAT CTNTTATAAA TGCATAATAA 60  
CCCAGTTNGT ATCAAAGGGT ATCGACTTAA GTGAAATTC AACATGCTGT TACTTTTTCC 120  
TTTTAATGTA ATNCTGTTTT CCAAATAAAT GGGGGAGACA AATGGAAA 168

SEQ ID NO:2448

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02818

SEQUENCE DESCRIPTION:

GATCTGTGCA ATAAAGTGTT TGCAGTCTTA TTATTCTCTA AGAAATTCCT TATGGACGTC 60  
ATAATTGTTG TATATTGAAC AAAATATTTA TACTTATGCA GTTGCATAAC ATTGAAATAA 120  
AAATTAGCA TGAAA 135

SEQ ID NO:2449

SEQUENCE LENGTH:167



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02819

5 SEQUENCE DESCRIPTION:

GATCCTGCCA GAAATTTCA AAGACAGTAG ATTGAAAAGG AAAGGCTTGG TAAAAAAGGT 60  
 TCAGGCATTG CTAGCCGAGT GTGACACAGT GGAGCAGAAC ATCTGCCAGG AGACTGNGCG 120  
 GCTGCAGTCT ACAAACCTTG CCTGGCCGA GTGAGGTGTA GCAGCAN 167

10

SEQ ID NO:2450

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS02820

SEQUENCE DESCRIPTION:

GATCAGNAGG CATCACTGAG GCCAGGAGCT CTGCCCATGA ACCTGTATCC CACGTACTCC 60  
 AACTTCCATT CCTCGCCCTG CCCCCGGAGC CGAGTCCTGT ATCAGCCCTT TATCCTCACA 120  
 CGCTTTTCTA CAATGGCATT CAATAAAGTG CACGTGTTTC TGGTAAA 167

20

SEQ ID NO:2451

SEQUENCE LENGTH:413

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS02821

SEQUENCE DESCRIPTION:

GATCCGGTTT CTTTTTGCTC GCCCCTGTTT TTTGTAGAAT CTCTTCATGC TTGACATACC 60  
 TACCAGTATT ATTCCCGACG ACACATATAC ATATGAGAAT ATACCTTATT TATTTTGTG 120  
 TAGGTGTCTG CCTTCACAAA TGTCATTGTC TACTCCTAGA AGAACCAAAT ACCTCAATTT 180  
 TTGTTTTTGA GTACTGTACT ATCCTGTAAA TATATCTTAA GCAGGTTTGT TTTCAGCACT 240  
 GATGAAAAAT ACCAGTGTG GGTTTTTTTT TAGTTGCCAA CAGTTGTATG TTTGCTGATT 300  
 ATTTATGACC TGAATAAATA TATTTNGTNC TTCTAAGANG ACATTTTGTT ACATAAGGGG 360  
 ATGGCCTTTT TTATACAANG GGAATAANAT TNTGGGCATT TCCTATGGAGGGCATT TCCTATGGAA AAA 413

35

SEQ ID NO:2452

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS02822

SEQUENCE DESCRIPTION:

GATCTGYNAT TGGCATCTTG GTTCTACCTT TTATCAGATG TTGTTGCCTT GTGCAATNA 60  
 CATTTTCTCT GAGTCTCCAT TTTCTCATTT ATAACATGCG GAGAATAATA CTTATATTTG 120  
 TGGTAGTAGT GTGAACATTA AAAAGATAAT GTATGTGAAG TACAAA 166

45

SEQ ID NO:2453

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

50

55

TOPOLOGY:linear

CLONE:HUMGS02823

SEQUENCE DESCRIPTION:

GATCCATGCT AATATTGTAT TTTTNTTAA AACATAGCTT TCCTGTAATT TAAAGTGCTT 60  
 TTATGAAAAT ATTTGTAATT AATTATATAT AGTTGGAAAT AGCAGTAAGC TTTCCCATTA 120  
 TAATATATTT TGNTATACAA ATAAAATTG AACTGAAGTC TGAAA 165

SEQ ID NO:2454

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02824

SEQUENCE DESCRIPTION:

GATCTTGTTA GAAGGCAGTA GGTCTGGGGT GGGGCCTGAG ATTCTGCATT TCTAACCAGG 60  
 TCCTGGGAGA TGCTGATGCT ATCGAGCCAC AACCACACTT TGAGTAGCAA GCCTCTGGCC 120  
 TATCCTTANN NNTTGAATA TTAAATGCT GCCTCTCAGT CAAA 164

SEQ ID NO:2455

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02825

SEQUENCE DESCRIPTION:

GATCAATGCC AGATTTTNTT NTTGGGGTAA GTTAGCTGAA GTCATTTAAA GATGGAAAGG 60  
 TGGGAAAATN CTTTGATATT TGATGTCATT GTATCCACAT TTNTTGTAAG ACATATTGCA 120  
 TACCANTTAT AATNATATCA ATTAAAGTTG ATAAAAGCTT CAAA 164

SEQ ID NO:2456

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02826

SEQUENCE DESCRIPTION:

GATCCCTTCT GCCCTGGCAG AATGGCAGGG GTAATCTNAG CCTTCTNCAN TCCTTTACCC 60  
 TAGCTGACCC CTTACCTCT CCCCTCCCT TTNCCTTTGT NTTGGGATTC AGAAAACTGC 120  
 TTGTAAGAGA CTGTTTATNT TTAATNAAAA ATATAAGGCT TAAA 164

SEQ ID NO:2457

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02827

SEQUENCE DESCRIPTION:

GATCCAGAAT ATTTTCATTT AAAGCTCAAC CATTAATTGG AACATGGTGA AACATTGTAC 60  
 ACATTGTAAG AGTAGGGAAC AGTACAAAAG AATGGAATCA AATACTATAT TATGTGAATA 120

ANCTAGAGTG ATTTTGAAT TTCACTCTCT TCACCCCTTA AA

162

SEQ ID NO:2458

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02828

SEQUENCE DESCRIPTION:

GATCAAAAAC CTCTATAGTA GCCACTAGGG CAAAAACTGT GTGTATGTGT GTGTGTAAGT 60  
 GTGTGTACAC TGTCAATAT GGTCAATAT GGTACCAATA GCCACATGTG ACTATTTAAA 120  
 TTCATTGCAA TGNAATAAAA TTAAAGGTAT ACTAGCTCAA A 161

SEQ ID NO:2459

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02829

SEQUENCE DESCRIPTION:

GATCTTCACC TCTCTGCCTC CCTACTGCCC CAACATAGCC TTGAGGAGGN TTCTCAGCCA 60  
 CCAAAGGGTT CTGGCCCTT CTCACCTCC TCTCCTCTCA GATGGAAGTC TGGTTATAAT 120  
 GGTGTTAGTT ATCGAATAAA AACGACTTCA GAATGCAAA 159

SEQ ID NO:2460

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02830

SEQUENCE DESCRIPTION:

GATCAATTTA AAATATTNA TTTCTTAAAA GCCTTTTTTG CCTGTTGTAA TGTGCAGGAC 60  
 CCTTCTCCTT TCATGGGAGA GACAGGTAGT TACCTGAATA TAGGTTGAAA AGGTTATGTA 120  
 AAAAGAAATT ATAATAAAG GGATACTTG CTTTCAAA 159

SEQ ID NO:2461

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02831

SEQUENCE DESCRIPTION:

GATCTATTTA ATTTGAGGTT GATGTTCTAT CCAATGGCCG AAGATAGCAG CAGGTTTTTT 60  
 TTTTCATATG TTGATTTGTT TCATTTGGAT TTTTTTTTA TNATNCTTNA TTGTCTTTTT 120  
 TTTNCCCAT CCCTGTCTTG NGATTTNCNG GCATGTTN 158

SEQ ID NO:2462

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02832

SEQUENCE DESCRIPTION:

GATCTGAAAT GTGATGATTA TTGGAATGCA TAAACATTGA CGTATTTTGG AATGTATTAA 60  
 AACTGAAATG GATAAAATTT AGTATATATG TTTATTTTGT TCTATCTCCT TTGTTGTAT 120  
 TTTTCTCTGC AGTATTAAAC ATTTGGAAGA GACTAAAGGT ATGCAAAANT AATGTCTTAT 180  
 TTTCATTATG TGTGCTTCCA TTGACACAT GGGAAATTAG ATTAATTTC AATTAAANTA 240  
 GNACTTTATA CAGAAA 256

SEQ ID NO:2463

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02833

SEQUENCE DESCRIPTION:

GATCTTGTGT CTA CTCTAGG ACTGGGCCCG AGGGTGGTTT ACCTGCACCG TTGACTCAGT 60  
 ATAGTTTAAA AATCTGCCAC CTGCACAGGT ATTTTGTAAA GCAAAATAAG GTTTTCTTTT 120  
 TTCCCTTTC TTGTAATAAA TGATAAAAT CCGAAA 156

SEQ ID NO:2464

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02834

SEQUENCE DESCRIPTION:

GATCTTCTCC TTTGTGAAGC ATCCCTCACC ACTACTACTG TGATGGGTCG GGGCCTTTCA 60  
 TCTGTTTTTC CACAGCATCT ATGCTTCTNT NCACTGTATC ATTTATCAA TTGATNNTTN 120  
 CTGCGTCCTG TAAAAACAN NGAGTACCTT AAGAAA 156

SEQ ID NO:2465

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02835

SEQUENCE DESCRIPTION:

GATCTGCATT TATCATGAGT TCCTTTTTTT TTTAACTTT ATTTTGGGA AAGTAACACA 60  
 TGANGTAGTT CAGTCATGTC AGGTTTGTCT GGGGTGGANT GGACCAGTCA GGTAGTTGAA 120  
 AGTTTTTTTT TAGNGATGAA AAGCTTGTGA NCNCCTGTAA ANCATGCTGN ATTTGAAATN 180  
 CATCTGTTNA N 191

SEQ ID NO:2466

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02836

## SEQUENCE DESCRIPTION:

GATCCACCCC CTGCCACAA AAAATTGCTC CTAATCCAC CGCCTATCCC AAACCTACAA 60  
 GAACTAATGA TAATCCCACC ACCCTTTGCT GACTCTTTT GGACTCAGCC CACCTGCACC 120  
 CAGGTGATTA AAAAGCTTTA TTGTCACAC ANAAA 155

SEQ ID NO:2467

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02837

## SEQUENCE DESCRIPTION:

GATCCTAGCA AATTGCCCCA ACCANCTTTA CTAAAGGGGG AGGAAGGGAG GGCAAAGGGA 60  
 TGAGAAGACA AGTTTCCCAG AAGTGCCTGG TTCTTTTAC TTTCCCTTT GTGTGCTTN 120  
 TTGTAGTTAA AGGAATTTAA TTTTAAAAA GAAA 154

SEQ ID NO:2468

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02838

## SEQUENCE DESCRIPTION:

GATCGGGCCT AGCCCGGCAA CACTAATGTA GAAACCTTTT TTTACAGAG CCTAATTAAT 60  
 AACTTAATGA CTGTNTACAT AGCAATGTGT GTGTATGTAT ATGTCTGTGA GCTATTAATG 120  
 TTATTAATTT TCATAAAAGC TGGAAAGCAG CAAA 154

SEQ ID NO:2469

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02839

## SEQUENCE DESCRIPTION:

GATCACCCGG GGCTGTCTGC ATACAGACTT CTCAGGGGAG TTCTCAGCTT GGACCCTTAT 60  
 CTCCCAGAA TCCTGGAACC TGCTCCTTCT GCTCTCGTGA CTGACTGTGT TCTCTATGCA 120  
 ACTTCCAATA AAACCTCTTC ATTTGAAAGG AAA 153

SEQ ID NO:2470

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02840

## SEQUENCE DESCRIPTION:

GATCTTAAGC CCAGCTCTGT TCTGCCCCCG CTTTCTCTG TTTGATACTA TAAATTTTCT 60  
 GGTTCCTTG GATTAGGGA TAGTGTCCCT CTCCATGTCC AGGAAACTTG TAACCACCCT 120  
 TTTCTAACAG CAATAAAGAG GTGTNCTTGT CAAA 154

SEQ ID NO:2471

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02843

SEQUENCE DESCRIPTION:

GATCACAGGC CTTGCTTTTG TAACAATGAT GACCCCGGCC TGTCTCATAT TCTGAAGAGG 60  
 AAAAGTCAAA GTGTGCTGN GGCTCCATAT TTCAACTAAA AATATATCTG TTGGAGAAAG 120  
 AAATTAACAA TAAAGAATTT TCATAGGTAA AA 152

SEQ ID NO:2472

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02844

SEQUENCE DESCRIPTION:

GATCGTATTC CCTGCTTTAA GGAAGTNTA GNCTTGTTTG GGTGATGAGA CAAAGTTCTT 60  
 GAGACATTTA AACTGTATTT ACCAGTGTA AAAATGTCAT TTATGGAGAT TAATTCATTA 120  
 TGGAAATAAA ACATTGCCTA AGCCCTTGAA A 151

SEQ ID NO:2473

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02845

SEQUENCE DESCRIPTION:

GATCCAATCA GCTGTAAGTN TTAAGCACAG GGCTGAGGCT CCCTCCAAGT ACCCACTGGG 60  
 AACAGCAGCT TCAACCTGAG CCCTGNGTCC CAGCCAGCCC CCACAATCAC CTATGCCCAT 120  
 TCTTCAGAA ACATTGGATG CATGTGCAAA 150

SEQ ID NO:2474

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02846

SEQUENCE DESCRIPTION:

GATCCAGAGA GTCTGAAGAC ATTTCTNATG CCTTTATATA TTGGAGAACC CTTCCTCAT 60  
 TTNATATCCT TTCTTCAAAA ATCTAAATNA TGTGCCTAAA AATAAGACAT GGCATAATAA 120  
 GGTATAATTA AAGAGATAAT AGAATGAAA 149

SEQ ID NO:2475

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02847

## SEQUENCE DESCRIPTION:

5 GATCCAGTAC CTGAAAGATT TGATAGAAGA GGTCCGCAAG GCAAGGGGGA AGAAAAGGGT 60  
 CCCCTAGTTG AGGATAGTCA GGAGCGTCAA TGTGCTTGTA CATAGAGTGC TGTAGCTGTG 120  
 TGTTC AATA AATTATTTG TAGGGAAAGT AAA 153

SEQ ID NO:2476

SEQUENCE LENGTH:147

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02848

## SEQUENCE DESCRIPTION:

15 GATCCTTTT GAGTCAGACA GATGTGGTTG CATCCTAACT CCATGTCTCT GAGCATTAGA 60  
 TTTCTCATTT GCCAATAATA ATACCTCCCT TAGAAGTTTG TTGTGAGGAT TAAATAATGT 120  
 AAATAAAGAA CTAGCATAAC ACTCAAA 147

SEQ ID NO:2477

SEQUENCE LENGTH:207

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02849

## SEQUENCE DESCRIPTION:

25 GATCTCCAGT GATTGGCGAT TTGACCTGGT TTCTNCCTGG ACTATTTGAA TGGGTGGATT 60  
 TGTGTGGTCA TCTCTGTCT TCTTTCCTTT TCCATTCTCC TNTATTNTN TATTACATA 120  
 CTTGTATGCA ACTNTGTAAT CTGATTNCCC CATGTAACAT TTAATTGA NGGGTGGTCT 180  
 GCGTGTNCAC TGGAAAACAT ATNTATN 207

SEQ ID NO:2478

SEQUENCE LENGTH:146

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02850

## SEQUENCE DESCRIPTION:

40 GATCGAGCTC ACAGGGGGCA CCCATCCTGN TAGTCAACAG AGTCTGAAGC AGTCAGGGTG 60  
 TTGGATTCTT CTGTTGTTGT CATCAATTCC TGCTGAGGGG TTTCTGGGGT TTTGTTTTTA 120  
 ATAAATAACT CTTTGTAGC CTAAA 146

SEQ ID NO:2479

SEQUENCE LENGTH:144

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02851

## SEQUENCE DESCRIPTION:

55 GATCCCGGCC AGCCAGGTGA CCCCCACGCT CTGGATGTCT CTGCTCTGTT CCTTCCCCGA 60  
 GCCCTGCCC CGGCTCCCCG CCAAAGCACC CCTGCCCACT CGGGCTTCAT CCTGCACAAT 120  
 AAATCCCGGA AGCAAGTCAG TAAA 144

EP 0 679 716 A1

SEQ ID NO:2480  
 SEQUENCE LENGTH:143  
 SEQUENCE TYPE:nucleic acid  
 5 TOPOLOGY:linear  
 CLONE:HUMGS02852  
 SEQUENCE DESCRIPTION:  
 GATCCAGGCA AATTCATGTT CTTTCTTTGT AACTCACTTT CTTCGTCAAC ATTTCTGTGA 60  
 CTCAATGGAT AGCATATTTT CATCAAGTAG CACGTATAAC GTGATGCTTT CATGTTTCTG 120  
 10 CCTTAAATAA AATAACCTC AAA 143

SEQ ID NO:2481  
 SEQUENCE LENGTH:290  
 15 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02853  
 SEQUENCE DESCRIPTION:  
 GATCTCTTTG ACTGCTGTAG TACTAAAGTG TACTTAATGT TACTANGTTN AATGCCTGGC 60  
 20 CATTTTCCAT TTATATATAT TTTTAAGAG GCTAGAGTGC TTTTAGCCTT TTTTAAAAAC 120  
 TCCATTTATA TTACATTGT AACCATGATA CTTTAATCAG AAGCTTAGCC TTGAAATTGT 180  
 GAACTCTTGG AAATGTTATT AGTGAAGTTC GCAACTAAAC TAAACCTGTA AAATTATGAT 240  
 GATTGTATTC AAAAGNTTAA TGAAAANTAN ACATTCTGT CCCCCTGAAA 290

25 SEQ ID NO:2482  
 SEQUENCE LENGTH:143  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 30 CLONE:HUMGS02854  
 SEQUENCE DESCRIPTION:  
 GATCTGATTG AGATGTACAT AGTTTTTTTT TTTACCATAA CTGAATTATT TNATCTCTTA 60  
 TGTTAACATG AGAAATGTAT GCCAAATNAT TAGTTGATGT ATGTTTTTNA ATTAAATATT 120  
 35 TAAATAAAAT ATTTGGAAGG AAA 143

SEQ ID NO:2483  
 SEQUENCE LENGTH:269  
 SEQUENCE TYPE:nucleic acid  
 40 TOPOLOGY:linear  
 CLONE:HUMGS02855  
 SEQUENCE DESCRIPTION:  
 GATCCTTATC AGGGAGAGCA GGAATCCTTA TTCCCGGTGT CGCTAGTACT CATCTCTGCC 60  
 45 GCCTCCTGTC TGCCCCCAGG CTGCTGCTNC TGCTGCCCTG TGGGTTGTGC CAAGTGTGCC 120  
 CAGGGCTGCA TCTGCAAAGG GGCCTCGGAC AAGTGCAGCT GCTGCGCCTG ATGCTGGGAC 180  
 AGCNCGCTCC NAGATGTAAA GAACGCGACT TCCACAAACC TGGNNTTNT TATGANCAAC 240  
 CCTGACNGTN ACCGTTTGCN ATATTNCNN 269

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5 SEQ ID NO:2484  
SEQUENCE LENGTH:140  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02856  
SEQUENCE DESCRIPTION:  
GATCATACAT TTTATATGGT TGGGACTTCT CTCTTCGGGA GATGATATCT TGTTTAAGGA 60  
10 GACCTCTTTT CAGTTCATCA AGTTCATCAG ATATTTGAGT GCCCACTCTG TGCCCAAATA 120  
AATATGAGCT GGGGATTAAA 140

15 SEQ ID NO:2485  
SEQUENCE LENGTH:139  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02857  
SEQUENCE DESCRIPTION:  
GATCCAACCC CACCTCCTG GGTGCGGCCA GAGGCAAGGC AGTCGCCGA GCTCCTGAAT 60  
20 CCCAAGAATG GTTCTGGCAA GTACTGCTGT TTGTTGTAG GGGCAAAGAG TTAATAATAA 120  
ACGAGGTCT GCCATGAAA 139

25 SEQ ID NO:2486  
SEQUENCE LENGTH:139  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02858  
SEQUENCE DESCRIPTION:  
30 GATCTGCCGG CTCCTGCTCA GCCTGTGTGG AAAGGAGGCC CACGGGCACT AGGGANNCNG 60  
AATTCTACAA TCCCGCTGGG GCGGCCGGGT CGGGAGAGAA AGGTGGTGCT NCAGTNGTGN 120  
CCCTGGGGGG TCATTGAN 139

35 SEQ ID NO:2487  
SEQUENCE LENGTH:138  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02859  
40 SEQUENCE DESCRIPTION:  
GATCTTCAAT GCCTCTGAGT CATTGTTATA AAAATCAGT TATCACTATA CCATGCTATA 60  
GGAGACTGGG CAAAACCTGT ACAATGACAA CCCTGGAAGT TGCTTTTTTT AAAAAATAA 120  
TAAATTTCTT AAATCAAA 138

45 SEQ ID NO:2488  
SEQUENCE LENGTH:231  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
50 CLONE:HUMGS02860

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## SEQUENCE DESCRIPTION:

GATCATGGTT CTCCTTGAC GATAGTTGGG CATCTGTATT TCCACTTGTG TGAATTTGCC 60  
 TTAAATTTT GGTATGGGT TTCACCTTTT AAAATAATCA AACATATTTA TCTTTTCCTG 120  
 TGTGATAGGT TTTTNCCTGT ATCTTTTCCT GTTAAACACA CAGACCCCTC CCAATCTGG 180  
 ACATTGAATA CNTATTCATT TTCCTTTCN NNAATANNCC NNANACANAC N 231

SEQ ID NO:2489

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02861

## SEQUENCE DESCRIPTION:

GATCTGCCCC TGCATTGTAG CTGCTTAAC GGAGCACTTC TCCTTTTCC AAAGGTCTAC 60  
 ATTCTAGGGT GTGGGCTGAG TTCTCTGTGA AAGAGATGAA CGCAATGCCA ATAAAATTGA 120  
 ACAAGAACAA TGATAAA 137

SEQ ID NO:2490

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02862

## SEQUENCE DESCRIPTION:

GATCTTTAAA TTTTGAGACA GTATAAGGAA AATCTGGTTG GTGTCTTACA AGTGAGCTGA 60  
 CACCATTTTT TATTCTGTGT ATTTAGAATG AAGTCTTGAA AAAAATTTA TAAAGACATC 120  
 TTTAATCATT CAAA 135

SEQ ID NO:2491

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02863

## SEQUENCE DESCRIPTION:

GATCCAAATA TTTCAAGCC ATGTAATCCA TTGGTTTGT GGGCAGTTTA ATAAACCTGA 60  
 ACCTTTGTGT GTTTCTAAT TGTACCTGAG TTGACCATCC TTTCTTTTA NAGTATATTT 120  
 CTNGTATGAT ATTNTGTAAA GCTCTCACCT GGTCTTTTA TGGGGACTTT TCGTTTTTGG 180  
 GCAACTGCAG TGTATTTATG TGAANCTTTA TANGAGAATT ANTTTTTCCA TGTGCATATT 240  
 AATATGGTNC CTCCACACAT GGNNAGGGCA CAGTGGCTTC GTGTTN 286

SEQ ID NO:2492

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02864

## SEQUENCE DESCRIPTION:

GATCATGCCT CTTTCCAACA CGTGTTTACA ATCTCCAAAG GGACTGTATT TNTNCTCTGT 60

GCTTAATNTG ATTGAAATA TGTGAATCA AAGTGAAATA TTTATNTTTT GAATAAAGGA 120  
GATAATAGCC TTAAT 135

SEQ ID NO:2493  
SEQUENCE LENGTH:135  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02865

SEQUENCE DESCRIPTION:  
GATCGAAAAC AAACGNTAGA TAATNCCCAA GGAGCTTACC AAGAGGCATT TNATATAAGC 60  
AAGAAAGAGA TGCAACCCAC ACACCCAATC CGCCTGGGGN TTGCTCTTAA CTTTCCNGTA 120  
TTNACTATG AGATN 135

SEQ ID NO:2494  
SEQUENCE LENGTH:135  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02866

SEQUENCE DESCRIPTION:  
GATCATGCCA CTNCACTCAC ACTGACACTG CCTCGGACAA CAGAGCAANA CTNCATCTCA 60  
AAAAACAACA AAAAAATCA CAGNCTCATT TTAAAGGAGC AGCAACCNA CAAATACAA 120  
NCTTCATTG ACAAN 135

SEQ ID NO:2495  
SEQUENCE LENGTH:134  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02867

SEQUENCE DESCRIPTION:  
GATCATTAAC ATGCCAGGGC AGTTCCCACT GATTTAGATG GTCCAAGATA ATCTCATTCA 60  
GGAGGCTTGA AACATTAATG GTTTAGTCTT GTGAATTTA ACAGTTCTCT GTCATCGTTT 120  
AACAAAACCA ACAN 134

SEQ ID NO:2496  
SEQUENCE LENGTH:134  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02868

SEQUENCE DESCRIPTION:  
GATCATGCCA CTGGACTCTG TGCTGAGCAA CAGAGTTAGA CCCTGTCTCT AAATAAATAA 60  
ATAAACAAT AAACAGTAAA AAAATGTATA GTTCAATCCT TATCTGTATT AAACCTCCTT 120  
TAACTTGTGT GAAA 134

SEQ ID NO:2497  
SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02869

SEQUENCE DESCRIPTION:

GATCACA TGT GGGCCCGTGT CTGGCCGCCG CCGCCNGCC CCGTCCCTGC GGNACCACC 60  
TAATTTATTG CCGTGCCTCC TGCTGCTGTG ACTGCTTTTG TACCTTTGCA ATAAAGAATT 120  
TTCTGGTTTC AAA 133

SEQ ID NO:2498

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02870

SEQUENCE DESCRIPTION:

GATCCTGGAC ATATTTTATA TTTATACCA ATATTTTATA TATTTNCTAC TGTGTCAAT 60  
GGTAGTGGTT TTTAAATTTT CAAACATTCA TTACTAGTAT ATAGAAATAN AATCACTTTT 120  
TAAAAATGTA AA 132

SEQ ID NO:2499

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02872

SEQUENCE DESCRIPTION:

GATCCTGTTT TTTCTTAACA AGTTGAGGCG TGGGTAGAGC AGGAATTGGT TTTCCAGCAT 60  
TGTGTCCGTA AACCTGAGTT AGAATAAGAT GTAACGGAAG CCACGATAAA GACTCGGTCA 120  
AATCCTGCAA A 131

SEQ ID NO:2500

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02873

SEQUENCE DESCRIPTION:

GATCCTGGAT GGAACGGCT TCTTTATCGA GAAGAATATA ATTCTCCATG AGGACTTAAT 60  
GAATCCAAAC CTGTGTCATG CCTGGTTTGC ATACCCAATT AAACACTNGA AATAAAAAATT 120  
NTTNGGGTNN AAA 133

SEQ ID NO:2501

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02874

SEQUENCE DESCRIPTION:

GATCTCTGCT CTTTGTGAGA GATTTGCAAA GACTCACGTT TTTNTTGTGTT TCTCATCATT 60

CCATTGTGAT ACTAAGAAAC TAAGAAGCTT AATGAAAAGA AATAAAATGC CTATGTTGTT 120  
GTTCTAGAAA 130

5 SEQ ID NO:2502  
SEQUENCE LENGTH:130  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02875

10 SEQUENCE DESCRIPTION:  
GATCAAAAAA GGCAGATGNA ANTACTTAAN ACTCAGTGTT TTGGAGAGAT TTCCTTTNAG 60  
TTTGTGGTT GGCTGGTTTG AACGATAGAA ATATGCAGCA TGCAATATAT GCTTATATTT 120  
NATTNAATN 130

15 SEQ ID NO:2503  
SEQUENCE LENGTH:129  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02876

20 SEQUENCE DESCRIPTION:  
GATCCCCCAC CTGGCAGAGG ACCCAGTACA AAATAGGCAC TCAATAGATG TTACACCAAC 60  
TTTGAAGGG CAAACATATT TCTTAATGAG AGGCAGTCCT TCATGTTTTN CAATAAAATG 120  
25 ACTTTTAAA 129

30 SEQ ID NO:2504  
SEQUENCE LENGTH:129  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02877

35 SEQUENCE DESCRIPTION:  
GATCTTCTCC GAGGCCACC GAAGGTACTG AAGAGCCTCA CCTGGGGGCA TTTGTGGGT 60  
GGAGGGCCAG AGTGTGTATA CCCAGGCTTG TCTGGAAGGA GAAGGCCTTT GCTGCCTGAA 120  
AGTCTCAAA 129

40 SEQ ID NO:2505  
SEQUENCE LENGTH:129  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02878

45 SEQUENCE DESCRIPTION:  
GATCTAAATA AGTGTTCAC GAAAGTTTT CCTAAGCAAA TGTAATATTA CCTCATTTGG 60  
GCATCATTAC TCTGTAAATT CTATATCAAA GAAATAAAC TTGCTACTTG CACTAAATGA 120  
AAAAACAAA 129

50 SEQ ID NO:2506  
SEQUENCE LENGTH:128

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02879

SEQUENCE DESCRIPTION:

GATCGTGCCC CGGGGCGCCG GCCCCTGNAG GGGCTCACCT GGATGGGGCC TGCAGTGCGT 60  
TCCCGCTTTG CTTCTTCCC TGGACGGCCC GCTCCCGAA ACGCGCGCAA TAAAGTGATT 120  
CGCAGAAA 128

SEQ ID NO:2507

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02880

SEQUENCE DESCRIPTION:

GATCACTCTT GTGGTTTGG GGGATGGCAT TATAAGAGAG GAGACTGGAN ACAGGGGGGC 60  
TATTGTNATG CAGATTTGTT GGATGTCCAC CCAGCATTCA CTTTNCAT CTTTGCAG 120  
GGGNNNN 127

SEQ ID NO:2508

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02881

SEQUENCE DESCRIPTION:

GATCCCACGC AGCGCTGAAC CGAACCAGT AGGAAGCCTT TCTCCCCANG GCACGTGGCT 60  
TCAGGGCGTT TCCATTGAC CAAGTTTGAC CCTGNTTGA ATAAAGAGAA GTGCGTTTGG 120  
ATTAGAAA 128

SEQ ID NO:2509

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02882

SEQUENCE DESCRIPTION:

GATCGAGCTT CTCCTCTGAG TTCTAACAAA ATGGTGCTTT GAGGGTCAGC CNTTAGGAAG 60  
GTGCAGCTTT GTTGTCCTTT GAGCTTCTG TTATGTGCCT ATCCTAATAA ACTCTTAAAC 120  
ACATTGAAA 129

SEQ ID NO:2510

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02883

SEQUENCE DESCRIPTION:

GATCTCTGAT TTAACCGTGT ACTATCCACA TGCATTACAA ACATTCGCA GAGCTGCTTA 60

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GATATATAAGC GTACAATGTA TGTAATAACC ATCTCATATT TAATTAAATG GTATAGAAGA 120  
ACAAA 125

5 SEQ ID NO:2511  
SEQUENCE LENGTH:124  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02884  
10 SEQUENCE DESCRIPTION:  
GATCTTCCAT CTCCTCAGCA AAAAAATAGG AGCCCTGGCC CCCCAACTTT TTNCANAGTA 60  
ATAGCCTTAN TTCCTTCCCT ATCTCCTTAC CAAAGTACAN GTNACATCTT TCCCACCTTT 120  
CNTN 124

15 SEQ ID NO:2512  
SEQUENCE LENGTH:124  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
20 CLONE:HUMGS02885  
SEQUENCE DESCRIPTION:  
GATCTACAGA TTCAATGCAA TTNCTATTAA AATCTNATCT GGCTTTTTTT GCATAAGCAA 60  
CAAAGGAAAA ANTAAGACAT CAAAATTNA AGANCTTTTG TCCTACAAAC AATATCATGA 120  
25 NGAN 124

SEQ ID NO:2513  
SEQUENCE LENGTH:343  
SEQUENCE TYPE:nucleic acid  
30 TOPOLOGY:linear  
CLONE:HUMGS02886  
SEQUENCE DESCRIPTION:  
GATCAGAAAA TTCATATTTA AGCAAAGTGA TACAAACACA GTGATTTGGG AATGCCTTCA 60  
TTTACAATGC AATACTTAAA TTTAATACT CTTGTAGGAG AAAAAGCAAC TGTATAAATG 120  
35 AATGTAGAGT GACTTTCTGC AATATTCAA ACCTATATCA GAGAATTACA CTGTGGGAAA 180  
NCTACCATTG TAATAAGTGT AGCAAAATCT CCTTAGATAT CTGAAAAGTC ATACTGGATG 240  
GAATCTGTAG GAAACGGTTC TATTTGAGG GAAGGGGGAT TCCTTTTTGT TTTTAAAGTG 300  
AATTCAGAAA ATGTTATAAA TAANTCTTTT GGTTATTAT AAA 343

40 SEQ ID NO:2514  
SEQUENCE LENGTH:123  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
45 CLONE:HUMGS02887  
SEQUENCE DESCRIPTION:  
GATCTNTACC CCACCCCTAT CTAACACCAC CTTGGNTCC CACTCCAGCT CCCTGTATTG 60  
ATATAACCTG TNAGGCTGGC TTGGTTAGGT TTNACTGGGG CAGAGGATAG GGAATCTNTN 120  
50 ATN 123

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SEQ ID NO:2515

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02888

SEQUENCE DESCRIPTION:

GATCCAAAAT TACCTTCCTA TTGCATTTCC TACTCCTTTG CTACGNGTAT TGGACCTCTG 60

GCCAAATNAC AAAAGATGTA CTCCTTGTNC TCTAAAACCA CACTAAAGTT TTCTNACTNN 120

N 121

SEQ ID NO:2516

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02889

SEQUENCE DESCRIPTION:

GATCAACCAA CCTTAAATAT ATGTATGTAT ATATGTATAT GTGAAAAACA GTTTGTATAG 60

TTGGAATATT TGTNTTTGTA ATTACTTGTG ATGTTTTAAA ATAAANTTT TATTCAGTTA 120

AA 122

SEQ ID NO:2517

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02890

SEQUENCE DESCRIPTION:

GATCTGGCAC CCCCTGGGTG GAGTGTCCCT CGGGGGCTTT GGGAAAGCAT GGCACCCTCA 60

GACCACACAG TAGCCAAGTT CTGGAGCAAA TAAAAGGCCT GTGTTATNTC TTGTNCTTGA 120

AA 122

SEQ ID NO:2518

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02891

SEQUENCE DESCRIPTION:

GATCTCAAAG ATATGCACCA GTTTGAATAA ATGCTTGTTT AAAGATTAAA TTTTACAATT 60

CATTTTAAAT TNCATTTTG TGACAATATT TCTAAACAAC GNCCATTTTA ATNACCAAA 119

SEQ ID NO:2519

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02893



## SEQUENCE DESCRIPTION:

GATCATAGGA TAGCTGACTT TGACAGTCAC ATTTATAAAG TAATTCACCTT AAAGATATAT 60  
ATTTTTTTTCA AACAAGTTT GCTACTTTTG AAAATAAATC TTTCTTTATA TTGCTAAA 118

5  
SEQ ID NO:2520

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10  
CLONE:HUMGS02894

## SEQUENCE DESCRIPTION:

GATCCAAACC CATCTTCCTG GACCTGAAGC TTATGCTTCC AGGCACCCCA CTCCTGAGCT 60  
GAATAAAGAT GATTAAAGCT TAATAAATCG TGAATGTGTT CACATGAGTT TCCATAAA 118

15  
SEQ ID NO:2521

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20  
CLONE:HUMGS02895

## SEQUENCE DESCRIPTION:

GATCTGCACA GTGTTATGGC ACCCTACTTC CTGCAGCAAC GGGACACNCT GCGGCGCCAT 60  
GTNCAGAAAC AGGAGGCCGA GANCCAGCAG CTGGCAGATG CCGTCTTNC AGGGCGGN 118

25  
SEQ ID NO:2522

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30  
CLONE:HUMGS02896

## SEQUENCE DESCRIPTION:

GATCCTATCT TTNCTGGCAG GACTGGNAGC CATGGTGGGC TACGTTNTGN TCAGCGGCAT 60  
TNTTCCATC CAGCGGGCAA CGCTGCTCGG GCCCCAGGCA CCCGGACCCT GGGCATGN 118

35  
SEQ ID NO:2523

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40  
CLONE:HUMGS02897

## SEQUENCE DESCRIPTION:

GATCTAGTCC GGACTTGCTG TGTATATTGT AACGTTAAAT GAAAAAGAA CCCCCCTTTG 60  
TATTATAGTC ATGCGGTCTT ATGTATGATN AACAGTTGAA TAATTTGTCC TCAGAAA 117

45  
SEQ ID NO:2524

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50  
CLONE:HUMGS02898

## SEQUENCE DESCRIPTION:

GATCGTNATT NAGAATCCAT GTGAATAGAC CTGCGATGGC CAAGGCTGTT TAAGCNACAC 60  
 TGGGTTGGAA ACACTTGGGC TCTCTCATNA TTATTAAAT TCTATTCAA TCTAAA 116

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SEQ ID NO:2525

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02899

## SEQUENCE DESCRIPTION:

GATCCTTTGC NTTCAAGACT AAGTTAATAG AGAAGATGTT TGTAACNTG GCCCAAGCTT 60  
 GGNTCCCGAG TGTATTGAAG CTAACCTCTT TNAGAAGCAC CACTCTCATA TATNAN 116

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SEQ ID NO:2526

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02900

## SEQUENCE DESCRIPTION:

GATCTCTGGG TAAAGAGGCC GTTATCTTT GTAAACACGA AACATTTTC CTTTCTCCAG 60  
 TTTTCTGTTA ATGGCGAAAG AATGGAAGCG AATAAAGTTT TACTGATTTT TGAGAAA 117

25

SEQ ID NO:2527

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS02901

## SEQUENCE DESCRIPTION:

GATCTAGGAA GACTTTGGAA AGAGTAGGAA GACTTTGGAA AGACTTTTC AACCTCATC 60  
 ACCAAGCTCT GTGCCATTTT NTATTTTACT AATAAAATTT AAAAGTNTTG TGAATCAA 119

35

SEQ ID NO:2528

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS02902

## SEQUENCE DESCRIPTION:

GATCCCCAGG AGGCCTGGNC CGCCAGAGG CTCCTCTCAG GCTGGGCCCC GACGTTTGGC 60  
 NCAGTGTTC TTGTGCCGT GGGCCCGGA GCNAGTAAAG TCTGGGCCAG GCAA 115

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SEQ ID NO:2529

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS02903

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## SEQUENCE DESCRIPTION:

GATCACGTTT CAGGGTCCTC CAAAANGCTA GCCCGGCACT AACTAGGGA ATTCNCCCT 60  
CTCCTGTCAC TTGTCATGGT CTCCTTGGT ATTAAAGGCC ACCATTTGCA CAAAACAAA 119

SEQ ID NO:2530

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02904

## SEQUENCE DESCRIPTION:

GATCCAGAA ATGTAGCTTG TTTCATATTT TAGTCTTCTT ATTTTGTAA AATGTGTAGA 60  
ATTTGCTGTT TTTNTTTTC TTTTGACAAC TCAGGAAGAA ACTGACCTCA GAAA 114

SEQ ID NO:2531

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02905

## SEQUENCE DESCRIPTION:

GATCAGCCCC CAAAGAAATG GGGGTGCATG CTGGGCCTGG CCCCCTGGCC CACCCCCACT 60  
TTCCAGGGCA AAAAGGGCCC AGGGTTATAA TAAGTAAATA ACTGTNTGT ACAGCCAAA 119

SEQ ID NO:2532

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02906

## SEQUENCE DESCRIPTION:

GATCTTGGCT TCTCAACAGG GCAAAGATAC CAGGCCTNCT GCTGAGGTCA CTGCCACTTC 60  
TCACATNCTG CTTAAGGGAG CACAAATAAA GGTATTGAT TTTTAAAGAT AAA 113

SEQ ID NO:2533

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02907

## SEQUENCE DESCRIPTION:

GATCAAAATG TTTGAAGAAA GGAACTTTAT TTTTGCAAGT TACGTACAGT TTTTATGCTT 60  
GAGATATTTT AACATGTTAT GTATATTGGA ACTTCTACAG CTTGATGCCT CCTGCTTTTA 120  
TAGCAGTTTA TGGGGAGCAC TTGAAAGAGC GTGTGTACAT GTATTTTTTT TCTAGGCAAA 180  
CATTGAATGC AAACGTGTAT TTTTAAATA TAAATATATA ACTGTCCTTT TCATCCCATG 240  
TTGCCGCTAA GTGATATTTT ATATGTGTGG TTATACTCAT AATAATGGGC CTTGTAAGTC 300  
TTTTCACCAT TCATGAATAA TANTANATAT GTACTGCTGG CATGNAAA 348

SEQ ID NO:2534

EP 0 679 716 A1

SEQUENCE LENGTH:111  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
5 CLONE:HUMGS02908  
SEQUENCE DESCRIPTION:  
GATCTGATGG TTTTAAAAAT GGGAGCTTCC CTNCACAGAC TCTNTCTCTC GTGCCGCTGC 60  
CATGGCCATG TAAGNAGTGC CTTTNACCTT CCCCCGTGAT TGTNAGGCCT N 111

10 SEQ ID NO:2535  
SEQUENCE LENGTH:110  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS02909  
SEQUENCE DESCRIPTION:  
GATCCCAACA GGACAAATCT GTGTACCTAT CTTTCTATCC TCCCTGAGCC TGTACCAACT 60  
AGATTCTTCA TATGTATTG TAACAGATTA AATTGGAAAG CAAACACAAA 110

20 SEQ ID NO:2536  
SEQUENCE LENGTH:110  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
25 CLONE:HUMGS02910  
SEQUENCE DESCRIPTION:  
GATCCCCAAC TGCTCCAGCC TCTGCCAAC TGAATCTTCA GCATGTTCTC ATCGGCGGAC 60  
TNTCTTGTGT AATGTAAACT GTGCCATGTT ATTAAAAAAT GTGAATAAA 110

30 SEQ ID NO:2537  
SEQUENCE LENGTH:110  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
35 CLONE:HUMGS02911  
SEQUENCE DESCRIPTION:  
GATCTGTTTG GAAAACATAG ATTGTTTTCC CCTCAAATAA GGGGAAAAAA AAANACCCCTT 60  
TNTNCAAAATN GNTTCTTTTG TAAAAAATA TTTTAAAAGG AAATCACAAN 110

40 SEQ ID NO:2538  
SEQUENCE LENGTH:109  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
45 CLONE:HUMGS02912  
SEQUENCE DESCRIPTION:  
GATCTTTTTA ACTCTACTGT GTCATTAAGA TGCTTTGTAC AATGCCAAAC CATAATTGGA 60  
GAAACTAAGT TTAATAAATA TCAAATAGAT TTTCTGTATT AAAGTTAAA 109

50 SEQ ID NO:2539

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SEQUENCE LENGTH:109  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
5 CLONE:HUMGS02913  
SEQUENCE DESCRIPTION:  
GATCTCCCCC ACCCTTGGAT TAGAGTTCCT GCTCTACCTT ACCCAGAT AACACATGTT 60  
GTTTCTACTT GTAAATGTAA AGTNTTTAAA ATAACTATT ACAGATAAA 109

10 SEQ ID NO:2540  
SEQUENCE LENGTH:109  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
15 CLONE:HUMGS02914  
SEQUENCE DESCRIPTION:  
GATCTCCTNT CCCTCACTCA GTGCACGGGA CAGCTNCTCC TCCGTCACAG CTTTGGNATG 60  
AAAGACAGAA GACAGCATGA TTGGCCTCAC CCACGTGCAG GNCAATNN 109

20 SEQ ID NO:2541  
SEQUENCE LENGTH:107  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
25 CLONE:HUMGS02915  
SEQUENCE DESCRIPTION:  
GATCTGTCAC TCAACTTGCT GCGTNACCTG AACACGTCAC TTTACCTCTC TGTGCCTCAG 60  
TTTTCCCATG CATGAAAAAT AAAATAAAAT AAAACGGGGA TTCTAAA 107

30 SEQ ID NO:2542  
SEQUENCE LENGTH:112  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
35 CLONE:HUMGS02916  
SEQUENCE DESCRIPTION:  
GATCAGTAAG GATTTCACCT CTGTTTGTAA CTAAAACCAT CTACTATATG TTAGACATGA 60  
CATTCTTTTT CTCTCCTTCC TGAATAATAA AGTGTGGGAA GAGACAAATA AA 112

40 SEQ ID NO:2543  
SEQUENCE LENGTH:109  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
45 CLONE:HUMGS02917  
SEQUENCE DESCRIPTION:  
GATCATAGAA GGTGGGGTT CCAGAAAGGC ATCTGTGTGA TGGTTCCATT GATGTGGGAT 60  
TTCCCTACTT GCTGTATTCT CAGTTTCTAA TAAAAAGAAC CAAATNAAA 109

50 SEQ ID NO:2544

55

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02919

SEQUENCE DESCRIPTION:

GATCCAGGAG ATANTTTTT CATTATCCT GACCAAGACT GAGCCAGCTT AGCAACTNCT 60  
GGGGAGACAA ATNTNAGAAC CTTGTCCAG CCAGTNAGGA TGACAGTN 108

SEQ ID NO:2545

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02920

SEQUENCE DESCRIPTION:

GATCGAGCCC AGCGTACAAC TTCCTCAAGT CGCCCAAAGA CAACGTGGAC GACCCACGG 60  
GGAACCTCCG CAGCGGGCCC CTGACGGGGT GCGGGGTGT CCTGCTGCNN NNGTGCCTC 120  
TCCTGGGCAT CGTTGTCTGC GCCGTGGTGG GGGCCGTGGT GTTCCAGAAG CGGCAGGAGC 180  
GGAACAAGCG CTTCTACTGA GTGGCGCCTC CGGCGGTGGC CTGTCCCTGG GCCCAGGAGC 240  
CAATGTGAAC TTTTTGGNT ACCGGGATTA TAAANGAACA ACAAGATGAC CTTATTCTT 300  
AATGTTTCA AATAAAATGA TTAAGATAT TTTCAAAAA AGN 343

SEQ ID NO:2546

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02921

SEQUENCE DESCRIPTION:

GATCCTGCCG TGCCCCATC CTGGCTGTTG GGGGTGTCCT GAGCCACCT NNNTNCGCCT 60  
GTTCCCTTCA GCCAACCCGT TTCTGCAGTA AAATTAAGCC TGTCAAA 107

SEQ ID NO:2547

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02922

SEQUENCE DESCRIPTION:

GATCACTGAA CCAGACACAG CATTGCTGAC ACATGAGACT AACACGTGCA ATTATTTAAA 60  
AAGATTTCAA TAAAACTNCC TGGCTGGCTC CGGGCCGCCC CTAAA 105

SEQ ID NO:2548

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02923

SEQUENCE DESCRIPTION:

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GATCCTGTGG GTTTAGTATC ATTATCTTCA GCTCTTTGAT ACNCTGTGTT AGAGTAATAG 60  
CTAAAGGAAG TTCATGTCAA TAAATTCATA CTTATATCAC AAA 103

5 SEQ ID NO:2549  
SEQUENCE LENGTH:104  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02924  
10 SEQUENCE DESCRIPTION:  
GATCCAGAGC TGGGGTGGAA GGAGAGCCAT TCTGAACGNC ACGNCTGGCC CGGTCAAGTGC 60  
TGCATGCACT GCATATNAAA TAAATCTGC TACACGCCAG GAAA 104

15 SEQ ID NO:2550  
SEQUENCE LENGTH:103  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02925  
20 SEQUENCE DESCRIPTION:  
GATCCCNAGG CTCTGTTCCA TGAGCCTGTT GCANGTTTGT GTACTTTAGA AATGTAAGT 60  
TTTGCTCTTA TAATTTTATT TTATTAATTA AAATTACTGC AAA 103

25 SEQ ID NO:2551  
SEQUENCE LENGTH:102  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02926  
30 SEQUENCE DESCRIPTION:  
GATCGATGAG GCAGGTCAGT TGTAAGTGAG TCACATTGTA GCATTAAATT CTAGTATTTT 60  
TGTAAGTTGA AACAGTAACT TAATAAAGA GCAAAAGCTA AA 102

35 SEQ ID NO:2552  
SEQUENCE LENGTH:102  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02927  
40 SEQUENCE DESCRIPTION:  
GATCATATCT AGTNTTNAAG TCTCTAGGAA CAATAGAGAT TATATCATAA CTCTGAAGAT 60  
GGACTCTAAA CTTTGTTTA CCTCCATGGA AAATAANGCN NN 102

45 SEQ ID NO:2553  
SEQUENCE LENGTH:101  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02928  
50 SEQUENCE DESCRIPTION:

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GATCGAATGA GGGTTAAATG AATTATTTC A TGTAAGCTC TTAGCCCTGT GCCTGGTACA 60  
TAGTAAATNC TAAATAAATA GTGGTATTCT TACTGTTTAA A 101

SEQ ID NO:2554  
SEQUENCE LENGTH:390  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02929

SEQUENCE DESCRIPTION:  
GATCCAGCTT ATTCTTTTAT TTTCAAGTCC ATTCTTGGGG CTGGTGGGGA GGCAGGAGAA 60  
TACCCCTCCC TAAGCCCTTA GTGTGTGCCG AGCTTGCTTT NTGATGTTGG CAGGGGAGGG 120  
GAGACCTGGG TGGTGNCCTGA GTTCCCTTTA TCAAACCCTT CAATGGGCAC AAAATTGAGT 180  
GCTTNNNTNN TAGGTTTTAT TTNNNNATGA ATGTCCAAAT CTGTGTTTCC CCCTGCCANA 240  
ACAGACTGTG TGGCCAGTTG AAAGTGTCTT GGTGTTGGT TCATCTCTCC CTCATTTTCT 300  
TGGAGGCAGG GCCTGAGANC CCGNCANAA TCTCCTATGG TTNTGAATCC ACGGCTTCTT 360  
TTTGGACATT AAAGGTTGAT TTGATGCAAA 390

SEQ ID NO:2555  
SEQUENCE LENGTH:227  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02930

SEQUENCE DESCRIPTION:  
GATCTATCCT CAGCACTGCT GAGTGTGCAG TCACACTTTC CTACCAACCC NCTTCTTACC 60  
ATCTCTAGCT GCCATTTGTG GGGGGAACAA AACAAGGGAA TCCTGATTGT GTACAGTATA 120  
AATTGTATTA TATTTTTTGT ACTTATGTTT TATGTAAATA GTTTGTCTCA TTCAATTGTA 180  
TGTGAGCATT GAAATAAATC CTACCATTTA GGGGAAAAAA ATNNAAA 227

SEQ ID NO:2556  
SEQUENCE LENGTH:106  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02931

SEQUENCE DESCRIPTION:  
GATCTTCAAA AATAATGCCT CTGTCTAGCA TGCCAACAAG AATGCATTGA TATTGTGAAC 60  
ATTTGTGATA TATGTATTAA TAAATAGAGC AATTACAAGC AGCAAA 106

SEQ ID NO:2557  
SEQUENCE LENGTH:99  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02932

SEQUENCE DESCRIPTION:  
GATCTTTCTT ACACAGTGAT TCATTCCTCT ATTTGTACAG TGGCTTTATG AAATATTGTG 60  
AATTGATACT GTAATCAATA AAGTGCTTTT AACCAGAAA 99



SEQ ID NO:2558  
 SEQUENCE LENGTH:98  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02933  
 SEQUENCE DESCRIPTION:  
 GATCCTGGTT CCCTGTTTGG AAAATTCACC ACCTCTAGCT CCTCACTGTT CTTTGTAATT 60  
 AACACGCTGT TGGTAATCTT ATTAATTATT TAACCAAA 98

SEQ ID NO:2559  
 SEQUENCE LENGTH:97  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02934  
 SEQUENCE DESCRIPTION:  
 GATCTGGGGA CCCTGACTGC ACAGAACAGT GGGCGCNTTA CAGACCACCG ACCGCCCAG 60  
 GGTGAATTAC ATCTTAATAA AGCTACTGTG AGAGAAA 97

SEQ ID NO:2560  
 SEQUENCE LENGTH:93  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02935  
 SEQUENCE DESCRIPTION:  
 GATCGCCGCC AACATCCAGG CTGACTACTT GTATCGGTGA CGCCCCACCG GCCCGCAGCC 60  
 CCTGCTGCCC AATAAAACCA CTCCGACCCC AAA 93

SEQ ID NO:2561  
 SEQUENCE LENGTH:92  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02936  
 SEQUENCE DESCRIPTION:  
 GATCATCCCT TGACAGTAGT TTGCTTTCAT CTCACCTTTC ATTTGTCCCA AANNCACCTA 60  
 TATTTAATAA AGTCCCCCCC NGTNGTCTCA AA 92

SEQ ID NO:2562  
 SEQUENCE LENGTH:91  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02937  
 SEQUENCE DESCRIPTION:  
 GATCCACAAA ATGAGACAAT GCATGTGAAA ATCCATGCTC ATGTTCTAAA CATGGAAACT 60  
 AGGAGCCTAA TAAACTTCCT AATTCAGTAA A 91

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 SEQ ID NO:2563  
 SEQUENCE LENGTH:96  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02938  
 SEQUENCE DESCRIPTION:  
 GATCGTATTT TTATATCATA TTCACATATT TTTTTTTTA ATTGGTGITA GATGACATGA 60  
 10 TTAATAAAAA AGGCAAGATA TTTTCAGAAT TTGAAA 96

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 SEQ ID NO:2564  
 SEQUENCE LENGTH:88  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02940  
 SEQUENCE DESCRIPTION:  
 GATCGCGCCA TCGCACTCTC AGCCTGGGCA ACAAGAGTGN AACTCCATCT CAAAAAATA 60  
 20 AAAATAAAAT AAGTAAGNAA TACCTAAA 88

25  
 SEQ ID NO:2565  
 SEQUENCE LENGTH:87  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02942  
 SEQUENCE DESCRIPTION:  
 GATCTAATAT ATATCATCAG AAAATATATA TTGTATGTTT ACTCTTATTT TCAGAAAGAG 60  
 30 AAAATGAATA AAAATGATGA CATCAAA 87

35  
 SEQ ID NO:2566  
 SEQUENCE LENGTH:87  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02944  
 SEQUENCE DESCRIPTION:  
 GATCGCTTGA NCCCAGGAGT TTTAAACCAG CCCGAGGAAC ATGGCGAAAC CCCATCTTTA 60  
 40 CAAAAAATAC AGAAATNAGC CAAGAAA 87

45  
 SEQ ID NO:2567  
 SEQUENCE LENGTH:86  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02946  
 SEQUENCE DESCRIPTION:  
 GATCTAAGGG GTTGCCATGG TGTTGAACAA TGCAACTTTT TATTTAAAAA AGCTCTGCAC 60  
 50 TGCCATGTAT GAAAGTNTCT TTATGN 86

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SEQ ID NO:2573

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02953

SEQUENCE DESCRIPTION:

GATCTGCCTG ATGGGAGGGC TCCTGTCGAG GGAGACAGAC ATATCCCCAC TGAAAAATTA 60

ATAAAATTGG TTTTACATAT CAAA 84

SEQ ID NO:2574

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02955

SEQUENCE DESCRIPTION:

GATCTGACTG GAAAACAATC CTGTATCCCC TCCCAAAGAA TCATGGGCTT TTTTTTNAN 60

TTAAAAAGCA GACAAATAGA CAAA 84

SEQ ID NO:2575

SEQUENCE LENGTH:82

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02957

SEQUENCE DESCRIPTION:

GATCAAAAGA AACTTAAAA GTGGAATGGG ATATGGCTTT TGGTACCTGA AAATAAATNC 60

TTTAATAATT GTAAGCCAGA AA 82

SEQ ID NO:2576

SEQUENCE LENGTH:82

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02958

SEQUENCE DESCRIPTION:

GATCAAAAAT ATAGTTATAA TTTNTAAAT TTAAAAATG TGATTGCNCT AATAAAGAAT 60

AAAANCTATG CTTTAAACA AA 82

SEQ ID NO:2577

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02959

SEQUENCE DESCRIPTION:

GATCACTGCA GNTTCTAGGA CCCGGTTTCT TTTACTGATT TAAAAACAAA ACAAAAAAAA 60

ATAAAAAAGT TGTGCCTGNN ACAA 85

SEQ ID NO:2578  
 SEQUENCE LENGTH:81  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02960  
 SEQUENCE DESCRIPTION:  
 GATCTCCCAT AATTGAAAT TGAAATCGTA TTGTGTGGCT CTGTATATTC TGTAAAAA 60  
 TNAAAGGACA GAAACCTTAA A 81

SEQ ID NO:2579  
 SEQUENCE LENGTH:79  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02962  
 SEQUENCE DESCRIPTION:  
 GATCCACCAT CTTATCTTGG TGCCATCCCT GACTTGGCTT CTGTCATAA ATGCCTATTA 60  
 AATGTTTCTT TCTGAGAAA 79

SEQ ID NO:2580  
 SEQUENCE LENGTH:79  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02963  
 SEQUENCE DESCRIPTION:  
 GATCCAATTG CTGGTTACAT TTTGGGAAGC TCTCATTTTA GTGCTATGTA GTTTCATTGA 60  
 ATAAACTGTT TAATATAAA 79

SEQ ID NO:2581  
 SEQUENCE LENGTH:75  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02964  
 SEQUENCE DESCRIPTION:  
 GATCTAAGAG GAAAGTGGTT ATCGGTTGCN NTTTATTTAT AAAGGATGCA AACATAAAAT 60  
 TAGATTTTGG GCAAA 75

SEQ ID NO:2582  
 SEQUENCE LENGTH:73  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS02965  
 SEQUENCE DESCRIPTION:  
 GATCAGCCTT TTTGTTTCAA TGAGGTGTCC AACTGGCCCT ATTTAGATGA TAAAGAGACA 60  
 GTGATATTGG AAA 73

SEQ ID NO:2583

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02966

SEQUENCE DESCRIPTION:

GATCCCAGAG TGGCCTGCCT ATCACAACCA CATCCCTTCC CCCCACAAGG CAATAAATCT 60

CATTCTTTA AA 72

SEQ ID NO:2584

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02967

SEQUENCE DESCRIPTION:

GATCAACGAC AAAATGCACT TCTCCCTCAA GNAGTGAGGC TTGGTCCAAT ACATGGCTCT 60

GCCCCCAGA AA 72

SEQ ID NO:2585

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02968

SEQUENCE DESCRIPTION:

GATCAATCTT GTATTTTCTG ACCACATAAA GGCTTCTTCT CTTTGAATA AAGTAGAAAA 60

GCTCTCCTCA AA 72

SEQ ID NO:2586

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02969

SEQUENCE DESCRIPTION:

GATCTTGTTT CTGAAGATGG TTAAAGTTAT AGCTTCTTAA ACGAAAGAAT AAAATACTGC 60

AAAAATGTTT TATATTTGGC CTTCCACCC ATTTTAATT GTGAGAGATT TGTACCAAT 120

CATCACTGGT TCCTCCTTAA AAATTAATAA GTAACCTCTG TGTAAA 166

SEQ ID NO:2587

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02970

SEQUENCE DESCRIPTION:

GATCATAGGA GAGACCCATT NGCTAGCTAC TTCATTCGTT CTGACCTAAT AATAAAAGTT 60

AGAACCATAA A

71

SEQ ID NO:2588

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02971

SEQUENCE DESCRIPTION:

GATCTGACGT TCCTTGTGAC TTAAGGGTCC GGCTTGGGAA TTAAAGTTTG TTTCTGGCCT 60

TTAGCCTACA AA 72

SEQ ID NO:2589

SEQUENCE LENGTH:70

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02972

SEQUENCE DESCRIPTION:

GATCTGGCCA GTCAAGGGTC CACAGGGTGC CAGCCTCTCA CCCTCAGAAT AAAGACATCA 60

GCCATTCAAA 70

SEQ ID NO:2590

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02973

SEQUENCE DESCRIPTION:

GATCATCTAA ACTGAGTCCA GCTGCCTAAT TCTGAATATA TATATATATA TATATCTTTT 60

CACCATAAA 69

SEQ ID NO:2591

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02974

SEQUENCE DESCRIPTION:

GATCCTTATT ACAGGAAAAG CATGAGTGGT GGCTAACCTG ACCAATAAAG TTATTTTATG 60

ATTGCAAA 68

SEQ ID NO:2592

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02975

SEQUENCE DESCRIPTION:

GATCTTAGAT TTTATGTAGT ATTAAGTGAA AAAATACGAA AATAATAAAC ATTGAAGAAA 60

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AAAATAAA

68

SEQ ID NO:2593

SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02976

SEQUENCE DESCRIPTION:

GATCACATTT TCTGTTGGTT AACATTNTTC CTAGCTTATA TGATGGAATT AAATATATTC 60

TGTGTAAAAA GGAAA 75

SEQ ID NO:2594

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02978

SEQUENCE DESCRIPTION:

GATCCACCTA ACAAGAAACC TAAAGTGTAG AGATTGCCAT TTTNATTGT AATTTTTTTT 60

TTTTTTN 67

SEQ ID NO:2595

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02980

SEQUENCE DESCRIPTION:

GATCACACAC CGGCTGTATT TAATATGTAA CATTTTCACA NATATTAAAG ANACAGAAGT 60

ATTAAA 66

SEQ ID NO:2596

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02981

SEQUENCE DESCRIPTION:

GATCAGCATG GGCCACGTAG NCGNGACTCC ATCTCTACAC ATAAATAAAA AATTAGCTGG 60

GCAAA 65

SEQ ID NO:2597

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02982

SEQUENCE DESCRIPTION:

GATCCAATTT ATGTTTTTTC TTTNTTTATA TTTTGGGGAA AATTAATAATT TTTTAAGGT 60



AAA

63

SEQ ID NO:2598

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02983

SEQUENCE DESCRIPTION:

GATCACGCAA TAATGACTAT GTAATCTCAA AAAACAAATA AAATATTCTT AACATGGCAA 60

A 61

SEQ ID NO:2599

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02984

SEQUENCE DESCRIPTION:

GATCCAAGCA GTGTGTCCT ATATACTGA TAAAAGCACT TGGTCTTNGA TTATCAGAAA 60

SEQ ID NO:2600

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02985

SEQUENCE DESCRIPTION:

GATCATTTTG CACATAGCTT TATCAACTTT TAAACATTAA TAACTGATT TTTTAAA 58

SEQ ID NO:2601

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02986

SEQUENCE DESCRIPTION:

GATCTTTGCA GTTTTGNGAC AATTACAAGT AAAGCTGCTA TAAACATTG TATGCAAA 58

SEQ ID NO:2602

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02987

SEQUENCE DESCRIPTION:

GATCGACACG CAGCTAGCCT CCTGCATTGT ATGGTTATAA ATAGCACCCCT AGTGAGTNC 60

GTCGTCCAGT CAAA 74

SEQ ID NO:2603

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02988

SEQUENCE DESCRIPTION:

GATCCTGGGG CAACCCATCT GGTCTCTTGA ATAAAGGTCA AAGCTGGATT CTCGCAAA 58

SEQ ID NO:2604

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02989

SEQUENCE DESCRIPTION:

GATCACGTTT CGTGTTCATA CTCAACGTTA ATAAAAGGAG AGAGTTTGTA GTGAAA 56

SEQ ID NO:2605

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02990

SEQUENCE DESCRIPTION:

GATCGCTGTG CCTGGCATAT AGTAGGTGTT CAATAAATGC CCTGTGACTC TCAAA 55

SEQ ID NO:2606

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02991

SEQUENCE DESCRIPTION:

GATCTATCCT CAACAACAAC AGAAAAAAGG AATAAAATAT CCTTTGTTTC CTAGTGAAA 59

SEQ ID NO:2607

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02992

SEQUENCE DESCRIPTION:

GATCCATTTT AAAATTTGTA ATTCAATAAA GTTTTTTTTG TTGTAAACA TAAA 54

SEQ ID NO:2608

SEQUENCE LENGTH:53

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02993

SEQUENCE DESCRIPTION:

GATCTTGAT TCAGTCAGGT TAAAAACAAG GACAATAAAA GAATGAACAC AAA 53

5 SEQ ID NO:2609  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02994

10 SEQUENCE DESCRIPTION:  
GATCTGGGGT GGGAGTAACA GGGCAGAAAT GATTAAATG TTTGAGCACA AA 52

15 SEQ ID NO:2610  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02995

20 SEQUENCE DESCRIPTION:  
GATCCTTTTT TTTTCCACA AAATTTTAC AAATAAAAAA TGTTCCCCTA AA 52

25 SEQ ID NO:2611  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02996

30 SEQUENCE DESCRIPTION:  
GATCTCAAAG TGCCTTCTGA AGCATCAGAG ATTAAATATT GTTCAAATA AA 52

35 SEQ ID NO:2612  
SEQUENCE LENGTH:53  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02997

40 SEQUENCE DESCRIPTION:  
GATCTGAATG GGGCTTNCCT GATGTTGTA TCTAAGGCTT AGGCCTATAG ATN 53

45 SEQ ID NO:2613  
SEQUENCE LENGTH:50  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS02999

50 SEQUENCE DESCRIPTION:  
GATCTGAAT GTATTTCTT AAGTTTATTA ATAGACATT TCACAATAAA 50

55 SEQ ID NO:2614  
SEQUENCE LENGTH:50  
SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03002

SEQUENCE DESCRIPTION:

GATCTATCTG GAAAATGNAG GACTCCGAAT AAAAAGCTAT TACTAATAAA 50

SEQ ID NO:2615

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03005

SEQUENCE DESCRIPTION:

GATCAGGGGA AATNTTTAAG CTAAATAAAT CTGGGGGGTT TTTTATTCAA A 51

SEQ ID NO:2616

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03028

SEQUENCE DESCRIPTION:

GATCGAATGG TATATATTAG AAATTACATC TGTTGTAATT AAAATTGTGT GAGCAATTAA 60

ACATGGTTGA NTTTTTCAAG CAAAAATCAG TTCATCTTTT GATGTAATTT TCTAGGCTAA 120

ATGGCAATCT CTGAAAGATG AATAAAGCTA TATTTATTTA GCAAA 165

SEQ ID NO:2617

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03030

SEQUENCE DESCRIPTION:

GATCACATTT TAAGCATCTN TCTCTCCTAC TCCATTAGA AAAATAAGTA ACAGGTGAAA 60

TGTGGTCTCA GTGTTAACGG GATAATTCTG CTACCGGCTC CTCCCTGATG ATTCTNAAAT 120

ACACTACTGA ACGAGCTCTG GCTGGTCCTT TCTATCCTGG ATGTGGTTCT TCTGTGTAGC 180

AATTCCTTGA NGTCCAGGTT GGAAAGATGT ACTCTTCTCA ACCAAGGAAA ACCTTAAATC 240

CCGTCGTGGC CAAA 254

SEQ ID NO:2618

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03031

SEQUENCE DESCRIPTION:

GATCAACCCC AGACTGGGCC AGAATGTTAG TGAAGGTTTT ATTGTGCCCC GTTGGAGGAT 60

AACGTTCTTT GGGTACTTTT TGTGGGTTGC AAATNAACTC AATTGCCACA AGTTTTAAAC 120

TGGTGTAAT CAAGCTTGAC TTAATGTGAT TGTNACTGTT ATATCCAGNC TATACTGCTA 180

GCAGCTGCTC ATACTGCAGT CAATTACTGG AAGCGGATAT ATTCCTATG CAAAAACTGT 240

TTAAACAATA AAATGAGCTA TGCTACAGAA A

271

SEQ ID NO:2619

SEQUENCE LENGTH:489

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03053

SEQUENCE DESCRIPTION:

GATCCACAGC TTAAAGATGG GAATTCAGGT ATGAAAGAAA ACAGGCAAGG AGGCACTGAG 60  
 GGAGAAAGAC ACAGACTTTA TCGCTCTGTG GCTCATTGTT ACTGGAATAT NCTAAACTC 120  
 TTGTNCACAT GCTATTATGA CTTATAAAGC AGCAACAGCT GAGGCGCACC AGGACACAGC 180  
 TTCCATTCT TTAACGTCTG TNCCTTAAC ATCGCTGAAA TNATTTACTG TTGAAGAGAT 240  
 GCCTTGCAGT GTGGCCAGCT GTGAGGAGAA AGCAGCTGGC AGTGTTAGGA CATTAGTCCA 300  
 CTTTCAGCGC AGGGTCTCTG GCCGGGTCTG ACTCAGAAAC CTTGGTACTC GNCCCTTGGN 360  
 CACAGTGCCC AGACCATGT AACCNACTNG NTCCTGCATT AACCNAGAAA TACCTCGGTT 420  
 CTATNTGTGC ACTTAGCTGG GGACTTACCC ACTGTAATCA CCTNAATNAA NGGGTTNTAA 480  
 ACATGGAAA 489

SEQ ID NO:2620

SEQUENCE LENGTH:471

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03055

SEQUENCE DESCRIPTION:

GATCCAAAAC GCTTCGAGGC ACCCCAAATN ACCTGCCCAT TCGTNAGGAN GACCCACCCA 60  
 CCCAGTGTTA TATTCTGCCT CGCCGGAGTG GGTGTNCCCG GGGGCACTTG CCGACCAGCC 120  
 CTTTGCCTCC CCAGGTTTGC AGCTCTCCCC TGGGCCACTA ACCATCCTGG CCCGGGCTGC 180  
 CTGTNTGACC TCCGTGCCTA GTCGTGGCTC TCCATCTTGT CTCCTCCCGG TGTCCCAAT 240  
 GTNTTCAGTG GGGGGCCCCC TCTTGGGTCC CCTCCTCTGC CATCACCTGA AGACCNCAC 300  
 GGCAANAAC GAATGTAANC TGTGNTGNN GNCTCGGTCC AACTTGGGN CCGTGTITNA 360  
 CTNAACTNAG CTCCTTAAAC GGAATATTT CNGGGAAAAT CCCATGNTTG GGTTTGGTC 420  
 TTAAACCTTG GTAACGGTTG AAATCCAATT AAAGNTTAA AAGTCATGAA A 471

SEQ ID NO:2621

SEQUENCE LENGTH:435

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03056

SEQUENCE DESCRIPTION:

GATCACCATT AAATCTGAAA GTACCTTTAA AAATACTGAG ATTNCCITCA TACTGGGCCA 60  
 GGNATTNAC GAAGNACCTG CAGATGACAG GAAAGTCAAG AGCACCATAA CCTTAGATGG 120  
 GGGTGTCTG GTACATGTNC AGAAATGGGA TGGAAATCA ACCACCATAA AGAGAAAACG 180  
 AGAGGNTGAT AAAGTGGTGG TGGAAATGCNT CATGAAAGGC GTCACCTCCA CGAGAGTTA 240  
 TGAGAGAGCA TAAGCCAAGG GACGTTGACC TGGACTGAAG TTCGATTGA ACTCTACAAC 300  
 ATNTGTGGG NTATATTGTT CAAAAAGNTA TTGTNGTTTT CCATGGATTT AGCAAGCAAC 360

TAATTTTNTC CCAAGCTNGN TTTTTCCTCAA TANTGGTNAC GTTGGNTAAA TAAANNTTTT 420  
TTTAGGNTTT TNAAG 435

5 SEQ ID NO:2622  
SEQUENCE LENGTH:411  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS03058

## SEQUENCE DESCRIPTION:

GATCTCATCA GGGGAAGGCT CTGTGATGCT GCAGGTTGAT GTAGACACAG TAAAAGGAGG 60  
GCTGAAGTTG AACCCCAACT NNCTGGTGGA CTTCGGGAAG GAGCCCCTTG GCCCAGCCCT 120  
TGCCCATGAG CTCCGCTACC CTGGGGGCGA TTGTAGCTCT GACATCTGGA TTTGAACTCC 180  
15 ACCCTCATCA CCCACACTCC CTATTTTGGG CCCTCACTTC CTGGGGGACC TGGCTTCATT 240  
CTGCTCTCTC TTGGCACCCG ACCCTTGGCA GCATGTACCA CACAGCCAAG CTGAGACTGT 300  
GGCAATGTGT TGAGTCATAT ACATTTACTG ACCACTGTG CTGTGTGCTC ACTGTGCTGC 360  
TTTCCATGA GTCNTTGAG GCACCAAGAA ATAACTNGT AACCTGTAA A 411

20 SEQ ID NO:2623  
SEQUENCE LENGTH:410  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
25 CLONE:HUMGS03059

## SEQUENCE DESCRIPTION:

GATCCAGGCG GGATGGAGTG TGGAGTGTGG GCACAGTGGC TTGTACAGGC CTGGNCTGGG 60  
CAGACTTGCC CCGGAGTCTC AGGCCACTGC GGAAGGAGGA CGCGTGGCCA GCAGGTGCCA 120  
CCAGGAGAGG AGAGGAGGGC CAGGCTGAGC TGCATCTNTG GACTCCAAGG AGAGCTTGGA 180  
30 GAGGTGACTG AAACCTGCCC CCACCCCGAG CCTGTNTCCA TCTGTGGGTC CTTGGGCAAA 240  
TTGCCTCATC TCTCTNAGC TCGAATGCGT AGTTTCAGGA CTAAGTAGGG TACTGTGTAC 300  
CAACTGCCTC TGCCAACGGC CCTGCACCTG GCANGCCTGG GGTACCTGGG CTTGGGGGNA 360  
AGGAAGTAGG CCTTNGGNAG GAGGCTGGAT TGCTTACAA TTTNTTTTNN 410

35 SEQ ID NO:2624  
SEQUENCE LENGTH:408  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
40 CLONE:HUMGS03060

## SEQUENCE DESCRIPTION:

GATCTGCGGC CCATCTACAT CTCTGTGCAG CCGCCTTCAC TGCACGTGCN GGAGCAGCGG 60  
CTGCGGCAGG CATACTGA AACCGAGGAG AGCCTGGTGA AGCGGCTNGC TGNTGCCAGG 120  
45 CCGACATGGA GAGCAGCAAG GAGCCCGGCC TGTTTGATGT GGTCTCATCATT AACGACAGCC 180  
TGGACCAGGC CTACGCAGAG CTGAAGGAGG CGCTCTCTGA GGAAATCAAG AAAGCTCAAA 240  
GGACCGGCGC CTGAGGCTTG CTGTCTGTTC TCGGCACCCC GGGCCCATAC AGGACCAGGG 300  
CAGCAGCATT GAGCCACCCC CTTGGGAAGG CGATACGGCA GCTCTGTGCC CTTGGCCAGC 360  
ATGTTGGAGT TGGAGGAGAT NCTTGCCCTT GTTGGTTTGG ACCATCCN 408

55

SEQ ID NO:2625

SEQUENCE LENGTH:398

SEQUENCE TYPE:nucleic acid

5

TOPOLOGY:linear

CLONE:HUMGS03061

SEQUENCE DESCRIPTION:

GATCTCAACG AGACAAACGA TGGGTGGACC CGAACTCCCC GGTGCTCTTN GAGGACCCAG 60  
 TCCTTTNTGC CTTGGCAAAA AAGCACAAAGC GAACCCAGC CCTGATTGCC CTGCGCTACC 120  
 10 AGCTGCAGCG TGGGGTTGTG GTCCTGGCCA AGAGCTACAA TNAGCAGCGC ATCAGACAGA 180  
 ACGTGCAGGT TTTTNANTTC CAGTTGACTG CAGAGGACAT GAAAGCCATA GATGGCCTAG 240  
 ACAGAAATCT CCACTATTTT AACAGTGATA GTTTTGCTAG CCACCCTAAT TATCCATATT 300  
 CAGATGANTA TTANCATGGA GGGCTTTGCC TGATGGTNTA CCAGAAGCCC TGTGTGTGGN 360  
 15 TGGGTGACGC AGAGGGACGT CTCNTGCGG GTGACTGN 398

SEQ ID NO:2626

SEQUENCE LENGTH:394

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03062

SEQUENCE DESCRIPTION:

GATCACAGCT GGGGGAAAAA AAGCTTTTTA ATTCTGTACC TTCCTAGTAG ATAAGTGAAG 60  
 AGCAGGGAAA GAGACCTTTA AATATTTTNC TATAAAAAA TTTGTGATAA GTTCTATCA 120  
 25 AAATGGGAG ATTGCAGAAA AGGCTTCCCT TGGNTCCAA GGAGGTGTAG CAGGTGTGAG 180  
 CAATATTAGT GCCATGTGCC TTTCACACAG GGTTCGATT TATCAGTCTG TTTCCGATG 240  
 NNNNGGTACA TGAAGAGTA CACCATGTGA AGAGAAGAGA GAATGATTGA AAATGTTTTA 300  
 GTATAGACCT CTTCTTGCA TGGGTTGCTA TTTCTAGAT TTTACTTTTT AGGGACCAAA 360  
 30 NTAAANTCCT TTGTTAAACN TGGGTCAGNG NAAA 394

SEQ ID NO:2627

SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS03063

SEQUENCE DESCRIPTION:

GATCGCACCA TTACTCTCA GCCTGGGTGA CAGAGAGAGA CCCTGTGCCN NTCAAAAAA 60  
 TGTTTTTTTT AAACAAGAAT CTCTCAGGCA TACTGAAATN TTGAAGAGGA AATNATATTA 120  
 40 ATATCTGGGA CTTGTTTCCA AATTGGAAT TGGGGCAGGG TGTAAATNGT TGGCAATATC 180  
 AAAGAAACGA GGAGTTGGAA TNATAATTGT AGAAGCTGCA TGATAGATAC ACATTCTTTA 240  
 TACTTCTGTA TATGTNGAAA TTTTNATCA AATTATAATN GTGTATAATG ACTAATTATG 300  
 45 CTTNCATTGT CTATCCTGTG TGGTTATGTN ACTTGCTGAA ATNNATACAT AANGGGTCTT 360  
 CAACCTTNAN NTGGTCTTAT CCANGGCATA NN 392

SEQ ID NO:2628

SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

50

55

TOPOLOGY:linear

CLONE:HUMGS03064

SEQUENCE DESCRIPTION:

5 GATCTGTAAT NATCTCTATT GGCCTGGGGT GCCTGTGCTA TAAATAAGTT TCTTCACATG 60  
 AAAAACACAG CCAGCCCAAG ATNACTTATC TGGGTTTAGG ATTCAATAGT ATTCACCTAAC 120  
 TGCTTATNAC ATGAGCAATT TCATCAAATC TCCAACTCT TAAAGNATGC TTTCGGAAAA 180  
 CACGCTGTAT ACCTAGATGA TGAATAATG CAAAATCCTT GGGCTTTGGT TTTTCTCTAG 240  
 TAAGGATTTT AAATAACTGC CGACTTCAAA AGTGTTCTTA AAACGAAAGA TAATGTTAAG 300  
 10 AAAAAATTGA AAGCTTTGGA AAACCAAATT TGTAATATCA TTGTATTTT NATTAAAGT 360  
 TTTGTAATAA ATTTCTAAAT TTAAA 385

SEQ ID NO:2629

15 SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03065

SEQUENCE DESCRIPTION:

20 GATCGGGGCC CTGGGGCTGT NAGACCCCGA CCNTCTCGAG GAACCCTGCC TGAACGCCT 60  
 CCATTACCAC TGCAGAGTGA GATGAGGGGA CTCACAGTTG CCAAGAGGGG TCTTTGCCGT 120  
 GGGNNGGNTC GCCAGCCACT CACCAGCTGC ACTGAGAGGG GAGGTTNGCA CACCCCTCCC 180  
 CTGGGCCGCT GAGGCCCGCG CACCTGTGCC TTAATCTTCC CTCCCCTGTG CTGCCCGAGC 240  
 25 ACCTNCCCGG CCCCTTTACT CCTGGGAACT TTGCAGCTGC CCTTCCCTNC CCGTTTTTAA 300  
 TGGCCTGCTG AAATATGTGT GTGAAGAATT ATTTATTTT GNCAAAGCAC ATGTAATAAA 360  
 TGCTGCAGNC CNGCCTNTGC CCAAA 385

SEQ ID NO:2630

30 SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03066

SEQUENCE DESCRIPTION:

35 GATCCCGGGN AGTNACAGGT GCCGACGTGA TGTGCTTCT NTGGTGCCCA GCTCCCTTCC 60  
 TGGTCTNANA CTAGCTCTGG GGTGGCGGG GGGCCCAACA CGCTGCTCCC GCTCCACCCT 120  
 GCGGCTNCTG CTGCTCTGTG CCTGCTGTCA GAGCCCTGGT GGGGGAGGAT GTGGCCACCC 180  
 TGAGACCCGG AGGAGACGGG CGTCTGCCTG GNTTTCGGA GAGCNGCTTA TGGGTGTGGT 240  
 40 CCGTCCAGAC ACCTTGTTTC AAGGGGGATG GCGGTNANGG GCAAGCAGAG CATCCCCACC 300  
 GNTGAGCAAG AACTTTTTCT TGTTTTTAAA CCATCACGTC CTCATTTCAC AATTGGAATA 360  
 AAGTGAGTTT TTTGGAACCC TGAAA 385

SEQ ID NO:2631

45 SEQUENCE LENGTH:381

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03067

50 SEQUENCE DESCRIPTION:

55



GATCGCAAGG AACTGGGCCG CCTACTACCC CGACCTGCCC ACCCCAGAAC AGCAGCAAGA 60  
 CATGGCCAG TTCATACATT TATTTCTAA GTTTTACCCC TGTAAGGAGT GTGCTGAAGA 120  
 CCTAAGAAAA AGGTTGTGCA GGAACCACCC AGACACCCGC ACCCGGGCAT GCTTCACACA 180  
 GTGGCTGTGC CCCNTGCACA ATGAAGTGAA CCGCAAGCTG GGCAAGCCTG ACTTCGACTG 240  
 CTCAAAAGTG GATGAGCGCT GCGCGACGG CTGGAAGGAT GGCTCCTGTG ACTAGAGGGT 300  
 GGTGAGCCAG AGCTCATGGG ACAGCTAGCC AGGCATGGTT GGATAGGGGC AGGGCACTCA 360  
 TTAAAGTGCA TCACAGCCAA A 381

SEQ ID NO:2632  
 SEQUENCE LENGTH:370  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03068

SEQUENCE DESCRIPTION:  
 GATCCGTAAG TCCATGACCA AGGAGGCCAT CCGAGAGCAC CANATGGCCC GCACTGGCGG 60  
 CACGAGACAG ACCTGTNCAC CTGCGGCAAG TGCAGGAAAA AGAACTGCAC CTACACACAG 120  
 GTGCAGACCC GCAGCTCTGA TGAGCCCATG ACCACCTTN TTGTCTGCAA CGAGTGTGGA 180  
 AACCCTGGA AGTCTGCTG ACCCCTCGTG TAGATGTGCT GCAGCCTTGG GCCCTCCCCG 240  
 GCCCACGTCC TCCGTTGACA CAGCTTCTNT GGAGACCCTA GAAGGCGGCA TGTCTGCCC 300  
 TCAACCTGCC TGCNTGGATT GCACCTTCT GCCCTTCCC CNTNATTATT AAATGTTTCT 360  
 TTTTGCCAAA 370

SEQ ID NO:2633  
 SEQUENCE LENGTH:344  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03069

SEQUENCE DESCRIPTION:  
 GATCTTCTTC AAGCCATTAT TTAACTCAA GAAACTCTA GAGAAGAAAA GTGAAGAAGT 60  
 CATGTTGAAG AAGATGTAAG AATGTGTCAA GACCATCCAG AAATNATATG AGAAATACTG 120  
 ATATTTTAAA TGGTTGACAT CATCCAGCGA AATGAATCTA CATTAAATGT TGTTTTAACT 180  
 GCGCTATGAT TAAAACCATT CATATAGAGT TAGTNTTAC AACTACTATT CTGTTATTTT 240  
 TTTTTTAATC TGACAACATT TGTCTAAGT AAGATAAGCA AAAAAATTCT TCAACTCCTT 300  
 TTGGCAAGAA AACTGTAACA GAAAATAANT TTTGAATGTG TACN 344

SEQ ID NO:2634  
 SEQUENCE LENGTH:341  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03070

SEQUENCE DESCRIPTION:  
 GATCCCTGGT CCAGAATTCC ATTTACCTTC TGGGCCAGAT ACCACCAGAA TGCCCGCTCC 60  
 ANATTCCCTC AGACCTTTGC CGGTCCCAT ATTGGTCCTG GTGGTACAGC CAGTGCCAAC 120  
 TTCGCTGCCA ACTTTGGTGC CATTGTTTC TTCTGGGTTG AGTGAGATGT TGGATATTGC 180  
 TATCAATCGC AGTAGTCTTT CCCCTGTGTG AGGCTGAAGC CTCAGATTCC TTCTAAACAC 240

AGCTATCTAG AGAGCCACAT CCTGTTGACT GAAAGTGGCA TGCAAGATAA ATTTATTTGC 300  
 TGTTCCTTGG GCTACTGNTT TTTTCCCCT TGTGTGCTGT N 341

5 SEQ ID NO:2635  
 SEQUENCE LENGTH:340  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03071  
 10 SEQUENCE DESCRIPTION:  
 GATCGNCAAG AAAATTNAGA TTGGCGATGG GGCAGAGCTG ACGGCAGAGT TCCTCTACGA 60  
 CGAGGNGCAC CCCAAGCAAC ACGNCTTCAA GCAGGCCTTC GCCAAGCCCA AGGGCCCAGG 120  
 GGGCAAGCGG GGCCATAAGC GCCTCATCCG NGGCCCAGGT GAAAATGGGG ATGACAGCTA 180  
 15 GGAGGCTGGA GCATNNGNCG GCCACGNTG GACTGTGGGG CTGCCACCT TCCGCTCCCT 240  
 GCCACCATCC TCCTTCCTGG GCTCCAGGAA AGTNTTCTG GGAGGTCAGG AGGGCTGGCA 300  
 GCTTGAACGC ACTTGCAGCG TCCGANGGNC ACCGGGCTTN 340

20 SEQ ID NO:2636  
 SEQUENCE LENGTH:335  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03072  
 25 SEQUENCE DESCRIPTION:  
 GATCTGTCTG CNTTCCTCAA GACCATTGCA CTGAATGGTG TGGAGGACGT GCGAACCGTG 60  
 CTGGAGCACT ATGCCCTGGA GGATGACCCG CTGGCGGCTT TCAAACAGCG GCAAAGCCGG 120  
 CTAGAGCAGG AGGAGCAGCA GCGCCTGGCC GAGCTCTCCA AGTCCAACAA GCAGAACCCTC 180  
 TTCCTTGGCT CCTCACCAG CCGCTTGTGG CCTCGCTCCA AACAGCCCTG AACTCTGGGC 240  
 30 CTCCTCAAAC TCAGTGCCTG GGTCCAGGGC CCCAGTGCTT CCAGACCAAG ACTTGGGCCA 300  
 CCACTTNTCC AATAAAGTAC ATCCGAGACG GCAA 335

35 SEQ ID NO:2637  
 SEQUENCE LENGTH:332  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03073  
 40 SEQUENCE DESCRIPTION:  
 GATCCAGTTG TGAACAAAGA GTCCTCTTNG TGGAAAAGAA AAAAATACAT NTCCCTTTAA 60  
 ACGGTGGATT GAAAATAACT TTNATTTATA AAGAGAAGAC TGAGGGCGGG GATACTGATT 120  
 CANNAATCCT GTAGCGTGTA ATAAAAGAAG AGGAAATGGC ATGGAATCAC TGCCTCCTGT 180  
 GATTTGAAGG CCATTGTGAA GGAAAACAAT GCAGTGAAAG AAAGTTCTTC ATATTAGGCC 240  
 45 AGATATCATT GCATCACATT TATTATCTT TCTGGNATTT TTATAGCCCT TAATAAAAAA 300  
 TATTAATAA GCCTGTGCTA TTGTGTCTTA AA 332

50 SEQ ID NO:2638  
 SEQUENCE LENGTH:335  
 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03074

SEQUENCE DESCRIPTION:

5 GATCAAGAAT TTGGTGTGGA CGTTGGCCCT GTTGTCTTTT TATAAACCAA ACTCTATCTG 60  
 AAATCCCAAC AAAAAAATT TAACTCCATA TGTGTTCCCTC TTGTTCTAAT CTTGTCAACC 120  
 AGTGCAAGTG ACCGACAAAA TTCCAGTTAT TTATTTCCAA AATGTTTGA AACAGTATAA 180  
 TTTGACAAAG AAAAATGATA CTTCTCTTTT TTNGCTGTTT CACCAANTAC AATTCAAATG 240  
 CTTTNGTTT TATTTTTTTT ACCAATTCCA ATTTCAAAAT GTCTCAATGG GGCTATAATA 300  
 10 AATAAACTTT CAACACTCTT TTATGGTNAA CCAA 335

SEQ ID NO:2639

SEQUENCE LENGTH:384

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03075

SEQUENCE DESCRIPTION:

20 GATCAAGCCT GCCTCAATCA GTATTCATAT TTATAGCCAG GTACCTTCTC ACCTGTNAGA 60  
 CCAAATTNAG CTAGGGGGGT CAGCCAGCCC TCTTCTGACA CTAACACACC TCAGCTGCCT 120  
 CCCAGCTCT ATCCCAACCT CTCCTCACTA TAAACTAGG TGCTGCAGCC CCTGGGACCA 180  
 GGCACCCCA GAATGACCTG GCCGCAGTGA GCGGATTGA GAAGGAGCTC CCAGNGGGG 240  
 CTTCTGGGA GACTCTGGTC AAGAAGCATC GTGTCTGGCG TTGTGGGGAT GAACTTTTGT 300  
 25 TTTTGTCTT TCCTTTTTTA GTTCTTCAA GATAGGGAGG GNAGGGGGGA ACCATGAGCC 360  
 TTTGTTGGCT AATCANTCCC AAGN 384

SEQ ID NO:2640

SEQUENCE LENGTH:352

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03077

SEQUENCE DESCRIPTION:

35 GATCAAAGGT TTAAAGTCTA ACTTCTAAGA TATATTTGCA GAAAGAAGCA ACATGACAAT 60  
 AGAGAGAGTT ATGCTACAAT NATTTCTTGG TTTCCACTTG CAATGGTTAA TTAAGTCCAA 120  
 AAACAGCTGT CAGAACCTCG AGAGCAGANC ATGAGAACT CAGAGCTCTG GACCGAAAGC 180  
 AGAAAGTTTG CCAGGNAAAA AANNGGCATC ATTATTACCA TCGATTCACT GCCTGGTTAA 240  
 NGNGGNAAGC TTACTTNGTT TNAGTGGCAG CCNCNTNGCA CGTGGTTTGC TATGNAGGTG 300  
 40 AANGGTTTCC CAATTCCTTC AGGCTTTTTN GGGGGTTTTT GGGCTCTNCC TN 352

SEQ ID NO:2641

SEQUENCE LENGTH:321

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03078

SEQUENCE DESCRIPTION:

50 GATCAAACAG CTCTAAGTAT GAAGCAAGAG TAAAGACTAA GGTTTCGAGA NCATTCCTAC 60  
 TCACATAAGT GAAGAAATCT GTCAGATAGG AATCTAAATA TTTATAGTGA GATTGTGAAA 120

55

EP 0 679 716 A1

5 GCAACCTTAA AGTTTTGAAG AAGACTGATG AGACTAGGTG CNNNGCTTCC TTTCATCAGG 180  
 TATCTTTCTG TGGCATTGGA GAACAGAAAC CAAGAAACAT GGTAATTNCT AANTTATGAG 240  
 GCTTTGCTTT TTGTTTGCTT TTAAGTAGAA AACCATGTTG GCAACATTGA GTTTTGGNGT 300  
 TGATTGAGAT AATATGNCCT N 321

10 SEQ ID NO:2642  
 SEQUENCE LENGTH:320  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03079  
 SEQUENCE DESCRIPTION:  
 15 GATCTTTGGC TGGAAACTA GAATTTATAG CAGTTTATTA ATGATACCTT AAATNACTCA 60  
 GGACTTAATG TAGCATTGCA CTTCTGTGTA CAGTAAACT GCTTTGTTTT ACTAAAGAGA 120  
 AAAATGTGAG TGGAAAAAT ATGTATGTGT TATATACTCA AATGTATATA ATNCTATCTA 180  
 TAGATTTATA TATGTATACA TTCTGTACAG TAGTTCCATC AAAATATGTA ATAATTCACA 240  
 CCAATTTTAT TAAATGTATT TNCTTTTCA AAATTAAAT TGAGCTGCTA TCAATATTAA 300  
 20 ATGAAGTTAT GGCATCTAAA 320

25 SEQ ID NO:2643  
 SEQUENCE LENGTH:303  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03080  
 SEQUENCE DESCRIPTION:  
 30 GATCCCTTCG ATGTGGATTC AGGGAGAGAG TTTGGAAACC CCAACAGGCC TGTGGCATGC 60  
 ACCCGGCTGC CCTCGGACAC TGATGACAGT GATGCGTCTG AGGACCCAGG GCCTGGCGCC 120  
 GAGCGCGGAG GAGCCAGCAG CAGCTGCTGT GAAGAGGAGC AGACGCAGGG ACGGGGGGCT 180  
 GAGGCCAGGG CCCCGGCTGA GGTTTGAAA GGAATCAAGA AACGGCAGAG AGACTNAGGG 240  
 TTGCAGACAC ATATATTTT GAGGCTGGGT GACGAGAAAA TCTAGAGACA TGAGGGACAT 300  
 35 AAA 303

40 SEQ ID NO:2644  
 SEQUENCE LENGTH:315  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03081  
 SEQUENCE DESCRIPTION:  
 45 GATCCAGACG CAAGANGGCT GTCCTCTCTA AGGAATATGG TTTTNTNCTT CTAAGTGGT 60  
 CTGCCAGCTT TATAATGGTG GCCCACCTAG CCATCANTGT TTCCAAGGCC CGCAAGANGT 120  
 ACAAAGTGA GTATCCTATC ATGTACAGCA CGGACCCTGA AAATGGGCAC ATCTTCAACT 180  
 GCATTACGCG AGCCACACAG AACACGTTGG AAGTGTATCC TCCCTTCTNA TTTTNTCTAG 240  
 CTGTTGGAGG TGTTTACCAC CCGCNTATAG CTTCTGGCCT GGGCTTGGCC TGGATTGTTT 300  
 50 GGACGAGTTC TTTAN 315

55 SEQ ID NO:2645

SEQUENCE LENGTH:314

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03082

SEQUENCE DESCRIPTION:

5 GATCCTTCTT GGGCCAGAA AGTCATTTGG CATGGCTCCA GGGCCCATGG CATCCGCTTN 60  
 TGGATACTA CTGTGAAGCA TGGCGAACCG CGGACACAGC GGTCACGGGA CTGCGCTCCC 120  
 CGCTGAGCAC GGGGAAGATT CTGGACCAGA AAGCATACAG CTGTGCTAAT CGGGCTAATT 180  
 10 GTCCTATGTA TCGAAAACAG TTTCATGNCA GNCGTTAGGA AGTAATTGGC TTCTTNATGA 240  
 TTCTTAAAN GNGTTTTCAA TTTTCCTAA TGNGAAGNGT TGNGACTGAA ATCTAAATG 300  
 TTTANTTGTG NAAA 314

SEQ ID NO:2646

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03083

SEQUENCE DESCRIPTION:

15 GATCACTGTG GACAGGGTGC AGCTCTACCA GTTCCTGTTT CTNCTGAGCC AGACCCTCTT 60  
 CAGGGAAGGG ACCAATTAAT TTTAAACTC ACTTGAAGCA CAGCTGGTCA TGGGGCTTGG 120  
 TATAAAGTTC CTATTTCCAC CCTGATACTT CCAATTCCTG GAACCCAGC CCACTCCNCC 180  
 ATCCCTCCTC CCTATCAAAC TAGTATAATG ATTTTGAATC GGTACAGTGT GTTTAACTGT 240  
 25 AACTAAGTTC GACAGACTAT TATTATCTTT GTAATAAATT AACCTAGCAA TAAAAATTAT 300  
 TCTGTNTAAA 310

SEQ ID NO:2647

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03084

SEQUENCE DESCRIPTION:

30 GATCTATTAA GCTTGANACA TTANGTNTCA TCACGCACTG AAGACAGGAA GCAGTTCACT 60  
 GAGTCAGCTG GTTCCCAAGC TCGCACAGAA GGTGATAAGT TACTATCAAA TGCCAGTNAG 120  
 AATCTNCTTA TAGAATAACC TGGGCCCAAG TNATTTTNGT AAAAACTTG CCCTTCTTTG 180  
 GTTTAATTN CTATGTGCTT TTAGGTGTGA ATCCAGATAT GCGGTCTTAA TTCCTTTGGA 240  
 40 AATACACAGT TCGTTTAGTT ACTGTACACT CTGTTTGTTC AATAAACTGC ATATCANCTT 300  
 CCNACAAA 308

SEQ ID NO:2648

SEQUENCE LENGTH:302

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03085

SEQUENCE DESCRIPTION:

50 GATCAGCAGC CCCTGAGCGG AGAAGAGGAG CTAGAGCCTG AGGCCAGTGA TGGTTCAGGC 60

TCCTGGGAAG ATGCAGCTTT GCTGACGGAG GCCAACCTGC CTGCTCCTGC TCCTGCTTCT 120  
 GCTTCTGCCC CTGTCCTAGA GACTCTGGGC AGCTCTGAAC CTGCTGGGGG TGCTCTCCGA 180  
 CAGCGCCCCA CCTGCTCTAG TTCCTGAAGA AAAGGGGCAG ACTCCTCACA TTCCAGCACT 240  
 TTCCACCTG ACTCCTCTCC CCTCGTTTTT CCTTCAATAA ACTATTTTGT GTCAGCTTCA 300  
 AA 302

SEQ ID NO:2649  
 SEQUENCE LENGTH:302  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03086  
 SEQUENCE DESCRIPTION:

GATCAGCGAG CTACCANGAC CAGAGACCAA CTCAAGCTAC AGCAGAAGNA TTTTCCAAG 60  
 CCTGTGACC ACAGTCACAT CACCCATCAG CACATGGAAG GCCCCTGGTA TGGACACTGA 120  
 AAGGAAGGGC TGGTCTGCC CCTTTGAGGG GGTGCAAACA TGA CTGGGAC CTAAGAGCCA 180  
 GAGGCTGTGT AGAGGCTCCT GCTCCACCTG CCAGTCTCGT AAGANATGGG GTTGCTGCAG 240  
 TGTGGAGTA GGGGCAGAGG GAGGGAGCCA AGGTCCTCC AATAAAACAA GTCATGGCA 300  
 AA 302

SEQ ID NO:2650  
 SEQUENCE LENGTH:303  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03087  
 SEQUENCE DESCRIPTION:

GATCCCAGCT GATGTAGACC CTCTACCAT TACTTCATCC CTGTNATCTG ATGGGGTCCT 60  
 CACTGTGAAT GGACCAAGGA AACAGGTCTN TGGCCCTGAG CGCACCATTG CCATCACCCG 120  
 TGAAGAGAAG CCTGCTGTCA CCGCAGCCCC CAAGAAATAG ATGCCCTTTC TTGAATTGCA 180  
 TTTTAAAAA CAAGAAAGTT TCCCACCCAG TGAATGAAAG TTTTGTGACT AGTGCTGAAG 240  
 CTTATTAATG CTAAGGGCAG GCCCAAATTA TCAAGCTAAT AAANTATCAT TCAGCAACAG 300  
 AAA 303

SEQ ID NO:2651  
 SEQUENCE LENGTH:296  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03088  
 SEQUENCE DESCRIPTION:

GATCTCAGCT GGAAGTTCTG TTTGGAGCCC ATTTCTGTNA GACCCTGTAT TTCAAATNTG 60  
 CAGCTGAAAG GTGCTTGAC CTCTAATTC ACCCCANAGT TGGAGTTCTG CTCAAGGAAC 120  
 GTGTGTAATG TGTACATCTG TGTCATGTG TGACCATGTG TCTGTNAGGC AGGGAACATG 180  
 TATTCTCTGC ATGCATGTAT GTAGGTGCCT GGGGAGTGTG TGTGGGTCCT TGGCTCTTGG 240  
 CCTTCCCTC TGCAGGGGTT GTGCAGGTGT GAATAAAGAG AATAAGGAAG TTCAA 296

SEQ ID NO:2652

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03089

SEQUENCE DESCRIPTION:

GATCTNACGG CCAGGCCTCT NTCCTGCTGC TGTITTTAAT TTTCCCAGGT AGTGGGAGAG 60  
 AGGAAAGGAG GGAAGGCAAG ATTCTTTCCC CCTCCCTGCT GAAGCATGTG GTACAGAGGC 120  
 AAGAGCAGAG CCTGAGAAGC GTCAGGTCCC ACTTCTGCCA TGCAGCTACT ATGAGCCCTC 180  
 GGGGCCTCCT CCTGGGCCTC AGCTTGCCCA GATACATACC TAAATATATA TATATATATA 240  
 TGAGGGAGAA CGTNTCACC AGNTTNTATC ATGCTGGAAA GAGTGTATGT N 291

SEQ ID NO:2653

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03090

SEQUENCE DESCRIPTION:

GATCTAAAGG GTGTAAAAAT ATTGATACTT CAATATTTCA CTTGCTGCCA GAAAAACAA 60  
 AATTCTCAAT CTTTGTGAAA TGGGAGGAGG ACTTTTGCAT ACATTTTAC TCTTTAAATA 120  
 ACGACAACGA CACTTATACT GTCATAATAA CAATNATGTA TTTCTTTGTG GTTTTAATTT 180  
 TTTTGTGAAT TTTACATAAA ACAGTTATTT TCTATTTNA CGCAGATAAA TATTTGTGCA 240  
 TAAAAATGTAA AAATAGTAAA ATGAGAAAAA TAAAACTATT ATACAGTAAA 290

SEQ ID NO:2654

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03091

SEQUENCE DESCRIPTION:

GATCTGTCCT CAGCTCTGGA CCCAATTCCC CTTACTTCAT TTTGGCAAAC ACTAAGTCAA 60  
 ATAGTGAAAT GCCTGTCACT ACATAGAACC TATTACCTGG GGCAAATACG AACAGATTGA 120  
 GTTTCCTTCA TCTTGTGTAA ATATGATGAA ACAGAGACCT GGTAACCTGG TGACACTGTT 180  
 AAACCCTTTT NGGGATAAAG CCAAATGTAA ATGGAAACAT TAAACAGATA ANTTGTGGTG 240  
 TTGAGACTTT TCTGAATTGA GAAAAATAAA TGTAATTTTG GAAGAAA 287

SEQ ID NO:2655

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03092

SEQUENCE DESCRIPTION:

GATCTGACCG GCTTCAAGCT CAAGCCCTAC GTGAGCTACC TCGCCCCTNA NGAGCGAGGA 60  
 GACGCCCTG ACGGCCGCGC ACTCTTTCAG CGAANCNGTG GCGCCTGCCA TCGAAAAAGNA 120  
 CTTCAAGGAC GGTACCTTCG ACCCTGACAA CCTGGAAAAG TACGGCTTCG AGCCACACA 180  
 GGAGGGAAAG CTCTTCCAGC TCTACCCAG GAACTTCCTG CGCTANTGGG CGGGGGAGGG 240

CGCGCCTGCC CTCATCTCAT TTCTATTAAA CGNCTTTGCC AGCTAAA

287

SEQ ID NO:2656

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03094

SEQUENCE DESCRIPTION:

GATCGTGGAG GAGGGACAAC GCTGCCACCG NTTGNCCTGC AACACGTGCC CCTACGTGCA 60  
 CAACATCACC CGCAAGGTAA CAAATCGGAA GTACCCAAAA CTGAAAGAAG TGGATGATGT 120  
 GCTTGGTGGA GCAGCTGCCT GGGAGANTGT TGA CTCTACT GCAGAGTCGT GTCCCAAATG 180  
 CGAACATCCT CGTGCTTACT TCATGCAGCT TCAGACCCGC TCTGCAGATG AGCCGATGAC 240  
 CACCTTCTAC AAGTGCTGCA ATGCTCAGTG TGGACACCGC TGGNGGGATT NGGGNCAGGT 300  
 NTGGCCCAAGC TGGCCTNGTG TGTGCTTGCC TTGTNCCTCN N 341

SEQ ID NO:2657

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03095

SEQUENCE DESCRIPTION:

GATCCACAAG GTTGTCTGCT AAACCTGCTC CTCCAAAGCC ACAGCCCAAG CCTAAAAAGG 60  
 CCCCTGCAAA GAAGGGAGAG AAGATACCCA AAGGGAAAAA GGGAAAAGCT GATGCTGGCA 120  
 AGGAGGGGAA TAACCTGCA GAAAATGGAG ATGCCAAAAC AGACCAGGCA CAGAAAGCTG 180  
 AAGGTGCTGG AGTTGCCAAG TGAAGTGTGT GCATTTTGA TAACTGTGTA CTTCTGGTGA 240  
 CTGTACAATT TCAATACTA TTTTATCA AGTTTAAA 279

SEQ ID NO:2658

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03096

SEQUENCE DESCRIPTION:

GATCTGAATG TNCAGTTCTA GCCAAGGTAG ATTTTACTTT CAACTTTTGA ATCAGTATCA 60  
 CTTTCTGTGC TTAACATTTT GGTGTTACCT TGTCTGTTTT CATTGTCTA AAATNCTGTA 120  
 GAGATGACTA AAATTGACA TAATGGTGTA AATGGATTGT NAAGGTAAC TTCAGTTGAN 180  
 GATTAAAGCA AGANGCCATT TTCCCATGA CTTTGGTTTT GTTTACATTT TNCCCTTTCA 240  
 GTTAGTATAC ACTACACGTA CTGTAATAAA GTNCAATAN 279

SEQ ID NO:2659

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03097

SEQUENCE DESCRIPTION:



5 GATCTTTNCT AAAGCAAGGC CTTGAGCAAG TAGGTTGCTG TCTCTAAGCC CCCTTCCTT 60  
 CCACTATNAG CTGCTGGCAG TGGGTTNTA TTCGGTTCCC AGGGGTTGAG AGCATGCCTG 120  
 TGGGAGTCAT GGACATGAAG GGATGCTGCA ATGTAGGAAG GAGAGCTCTT TGTGAATGTA 180  
 AGGTGTTGCT AAATATGTTA TTGTGGAAAG ATGAATGCAA TAGTAGGACT GCTGACATT 240  
 TGCAGAAAAT ACATTTTATT TAAAATCTCC TAAA 274

10 SEQ ID NO:2660  
 SEQUENCE LENGTH:259  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03098  
 SEQUENCE DESCRIPTION:  
 15 GATCTGCCTG CNTTGGCCTC CCAAGGTGCT GGGATTACAG GTGTGAGCCA CCACCCCCAG 60  
 CCGCCTCTAT GCTTTTGGNT TCTTTGATAT ATCTAAACTT AAGGTCAGAA CAGAAATTCA 120  
 TGTGCTGAAC AGAATGGATT CTTTTGTCAG TACCAATCCA ATTGAATCCT CTTTTIATTT 180  
 TCCTGCGTCC TTACCAGTCA CTTTGATAGT GCTAACTAAC CTACACTATG GGGGTTATTC 240  
 ATGANTTAAG TATGATAAA 259

20 SEQ ID NO:2661  
 SEQUENCE LENGTH:272  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS03099  
 SEQUENCE DESCRIPTION:  
 GATCTGTGTT TGTAATACTG GTTGTAAATTA ATTTTTTTAA TTCATGAACN AGCGGAAAAT 60  
 TTATTAAATT AACTATTAAC CACATTCACC TTGTAAATGA CTGTATAAAA CTNGTNGACA 120  
 30 ATGCACTGAC TTTAGAAAGA TGTTAATGTG CATAANTNGA GTGTAAATAA NATAGTGTG 180  
 ATGTACTGAN ATATGACCTG TATAANNNGT ATTAGTAATT GTNTATGGGG TGTACCTGTT 240  
 TATCTGTAAC TGTNATCCAA ACAAATNAAA TN 272

35 SEQ ID NO:2662  
 SEQUENCE LENGTH:270  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03100  
 40 SEQUENCE DESCRIPTION:  
 GATCTATCTG GNNTGTGCNT TAGACTNGAT GAGAAGGTGT GAACTCTGCA GAAAGTCTCT 60  
 CCTTCATCAC TGAATTCAGT CACTTGGAGA TGACAACTTC AAATGCTAAC CCGATGACCC 120  
 CAGAAAACCG TGTGAGATTC GTACCGAAGA ACCTTGTGGA ATCCCTTTNC TTAGGCCCAA 180  
 45 CCTGGTCGAT AGCTCGAGAA AGANTNTTTN CCAAGGAAAT GTCTCGGATA TGGGTACTGT 240  
 ATTTGAAAGC TGTTAGCTTT GTCAACACGN 270

50 SEQ ID NO:2663  
 SEQUENCE LENGTH:268  
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03101

SEQUENCE DESCRIPTION:

5 GATCATGAAT CAAGCCCTGG AACAGATGAA GACAAAAGCG GATGAGTGAG TTATATAAAC 60  
 TTACTTCCAT TCTGTTTCGG ATTTAAAGTT TGAGAGACTT GCTAATNAAT CTCCTTTATG 120  
 TTGTTTTCCT TTTCATTGTT TTTGGATTGT TTTATGTTG TCCTTTTTTT TCTTAATGTG 180  
 GATTTTCATTG AGTTGATTTT TTGATAATCT GCAATCTGGA TAATTTGTAC TGCTAAAGTT 240  
 TTAATAAACT CGACATGAGA AAAACAAA 268

SEQ ID NO:2664

SEQUENCE LENGTH:267

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03102

SEQUENCE DESCRIPTION:

15 GATCAAAATA GTAATAAATC AACAAATAAT TTTGATTGA CTGGTGGAAT TAGATTTACT 60  
 AAATAAAAT GGCTTAAATT TTGACTGTAC TAACTATAAA TGTAATGAAT TATAATAATT 120  
 20 ATAAATGGTA TAAATGCATT CTACAATGTG ATTATTTTCT GTATTTTAGT ATATAGTATA 180  
 AAATGGAATT ATGGGGTTAA AGTACTTTTA TTACATTCT TAATCCATTG TTTTACCTA 240  
 ATAAATTTT CTCCTCTATA TTCCAAA 267

SEQ ID NO:2665

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03103

SEQUENCE DESCRIPTION:

25 GATCCGAATC TGTGCCAGC GCTAAAGGCT CAGTGTTAGC ATGGCTNNN CTGNCCGGTG 60  
 TGCCATATTC TTGTTGGAGA TGAACCGTAG CACCAGAGCC CATTCCTCCT TGTCAGTCTT 120  
 GGCCCAAAGA TGTACCATT CCTAGTTATT TGTACCACA TAATTGGTGT TGATTGGAAG 180  
 35 CTTTTCTGA GATGGGACAG AACTGCTGGG TTGTCTTTT CCATGTAAT TAAGCATAGT 240  
 AATATAAATA AAGTAATAGT TGGAAA 266

SEQ ID NO:2666

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03104

SEQUENCE DESCRIPTION:

45 GATCCTCCCT GTCATGCCAC ATTTCACTGA TTGGAATGTG GAAATGGAAA AGGAATTTAG 60  
 GATGTGCATT TTCACCTGAG GTTCCCTGC ATCCCTGCAG TGCCAAAGCC CCACCTTCAG 120  
 GGACCACCTG GAATGTGTGA GGGGCTGACA GCACAGTAAC GTGCATACAT ATCTGCAGGG 180  
 CTGGAATGGA AGCTTTAAAG GTGGTAGTGA TTTTNATTTT GGAAGAATCA TGTTACCTTT 240  
 50 TTGTTAAATA AAATTTGTAC TCAAA 265

SEQ ID NO:2667

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03105

SEQUENCE DESCRIPTION:

GATCCAGTGT CCATGGAAAC ATTCCACAT GCCGTGACTC TGGACTATAT CANTATTGG 60  
 AAAGCAGGGT TCCTCTGCCT GCAAACAAGC CCACGTGGAC CAGTCTGAAT GTNITTCCTT 120  
 TNCACCTATG TTTTAAAGTA GTCAAACCTC AAGAAACAAT CTAAACAAGT TTCTGTTGCA 180  
 TATGTGTTTG TAAACTTGTA TTTGTATTTA GTAGGCTTCT ATATTGCATT TACTTTGTTT 240  
 TTGTAAGTCC TGATTCTCCC TTTNCGGATA CTATTGATGA ATAAAGGANT TAANGTGGAT 300  
 AAA 303

SEQ ID NO:2668

SEQUENCE LENGTH:263

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03106

SEQUENCE DESCRIPTION:

GATCAACCAA GGCAGATGTG ACAGCAAGGG CCACGGACCC CATGGCAGGG GTGGCGTCTT 60  
 CATNAGGGAG GGGCCCAAAG CCCTTGTGGG CGGACCTCCC CTGAGCCTGT CTGAGGGGCC 120  
 AGCCCTTAGT GCATTCAGGC TAAGGCCCTT GGGCAGGGAT GCCACCNTG CTCCTTCGGA 180  
 GGACGTGCCC TCACCCCTCA CTGGTCCACT GGCTTGAGAC TCACCCCGTC TGCCAGTAA 240  
 AAGCCTTCT GCAGCAGCTG AAA 263

SEQ ID NO:2669

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03108

SEQUENCE DESCRIPTION:

GATCTGGCCT AGGTCCCCC TTTNTNCTGT CCCCTGTNTT TAAGTCGGGA TTTTACAGA 60  
 GGGAGCTGTC TCCAGACAGC TCATCAGGAA CCAAGCAAAG GCCAGATAGC CTGACAGATA 120  
 GGCTAGTGGT ATTGTGTATA TGGCGGGGAC GTGTGTGTCA TTATNATTG AGTTATGCTG 180  
 TTGTTTAGGG GTAAATAACA GTAAATAATT AATAATAATA ATAATAATAN TAATAATAAN 240  
 GGNGCNGACG TTCTTAAA 258

SEQ ID NO:2670

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03109

SEQUENCE DESCRIPTION:

GATCCACCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA TCACACCTGG 60  
 TCAACTTCT TTTGATTAGT GTTTTGTGG TATATCTTTT TCCATCATGT TACTTTAAAT 120

ATATCTATAT TATTGTATTT AAAATGTGTT TCTTACAGAC TGCATGTAGT TGGGTATAAT 180  
 TTTNATCCAG TCTAAAAATA TCTGTCTTTT AATTGGNGTT TAGACAATTT ATATTTAATA 240  
 AAATGGNNGA ATTTAAA 257

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SEQ ID NO:2671  
 SEQUENCE LENGTH:257  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS03110

SEQUENCE DESCRIPTION:

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GATCAGATGT NGCTCAGAAA CTTTCATTGT TTACCTAATA ATTTAATATC ACTAGTTTCC 60  
 TAGTGGGTCA AGCAGATGCA AAANCCAGCT TATTCCTCC TATGTNCTCT CAAGCTTATN 120  
 GCTTATTNA AAGTAAAANC CTGAAAAAGG AAAATATTAG GTTGGTGCAA ACGTAATTNC 180  
 GGTTTTGCCA TTGTNGAAAT TTGCCGTTT ATATTGGAGT ACATTCTTAA NTAAATGTGG 240  
 TTATGTTATA CATCAAA 257

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SEQ ID NO:2672  
 SEQUENCE LENGTH:256  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03111

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SEQUENCE DESCRIPTION:

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GATCAATTAC TGTCTCACT TAGAACAAAG CCTGAGTCCG AGAATATTTA TATTTTACCA 60  
 ATATATGCCT GTTACAAGAG AAGGAAATAT GAGTTATTTA AGTTTAACTT TTTTATGTGA 120  
 ATTCAGAGTT TATTATCGA GGGAAATATG TACAAAGAAG CTTCAAATGG AATATTACC 180  
 GACATTCCTT ATACATGACA GACACTNGGC TACATGGGAA GATGATGTTA ATAATAANNT 240  
 GATTTTTAAN TGGAAG 256

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SEQ ID NO:2673  
 SEQUENCE LENGTH:256  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03112

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SEQUENCE DESCRIPTION:

GATCTGGAGA GGATTAGGGA CGGCTCTTGT GGGCACATTT TNNCTCTAGT TTCATGGGTG 60  
 GAGATGGCAT CTCCTGTGGT CTGCAGCATG CAAGTAAAGA CACCAGGTGG CACCATTNAT 120  
 NAGCTTTCAA TCCCATGGAG AGGTCCCATC ATGTAAC TNC CAAGAGGTTG AAGGAACCAA 180  
 CTACCTCTTG CATATTGTNG CTAATGGTTC TNGCCTTCTC CTTCCAGACT TGGGAAATAA 240  
 NTTTNAAAAT NGTAAA 256

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SEQ ID NO:2674  
 SEQUENCE LENGTH:433  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03115

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## SEQUENCE DESCRIPTION:

5 GATCTACCTT GGTGATTGG ACCCTGGTTG CTTTGTGTCT AGTTTTCTAG ACCCTTCATC 60  
 TCTTACTTGA TAGACTTACT AATAAAATGT GAAGACTAGA CCAATTGTCA TGCTTGACAC 120  
 AACTGCTGTG GCTGGTTGGT GCTTTGTTTA TGGTAGTAGT TTTNCTGTAA CACAGAATAT 180  
 AGGATAAGAA ATAAGANTAA AGTACCTTGA CTTTGTTTAC AGCATGTAGG GTGATGAGCA 240  
 CTCACAATTG TNGACTAAAA TGCTGCTTTT AAAACATAGG AAAGTAGAAT GGTGAGTGC 300  
 AAATCCATAG CACAAGGTAA ATTGAGCTNG TTANGGCAAT CAGGTAAAAT AGTCATGNTT 360  
 10 CTNTGTNATG TAANCCCGTA AATGANTGTT CCTGGTTTCN CGGTGGTTTT TTNANGGGNC 420  
 NCNTTNANNT TTN 433

SEQ ID NO:2675

SEQUENCE LENGTH:250

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03116

## SEQUENCE DESCRIPTION:

20 GATCAGAAGA AAGAAAGACA ACTTCCTCT GCGCGGAACA CTCACACGGA AGGGCTGGCC 60  
 GCCTCCCTGA GCCGGCTGGG AGTNGACGAC AGGACCTACC TCCCAGAGC AAGGGCCTGG 120  
 GGCTTCCCGC CAAAGCTGCC GCGGAACCCC GCTAGTGCGA CCACCTCCC TCCGTCGGTA 180  
 TGTCTGCTT TCCAGCTGAA CCCAACTAC AAGTGGGTTT AAAAAATAA ACACCACCAC 240  
 CAAAAACAAA 250

25 SEQ ID NO:2676

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS03117

## SEQUENCE DESCRIPTION:

35 GATCTGAAAA AGATGGTCAT TCCGGACTCC TGACGCCGCC AGTCCCGCGG TGAGACGTGA 60  
 GCNCCATTGG GTCCAGTGGC CTCNTTTCC GTGGCAACCT AGTAACCATT AATTTTNAAT 120  
 TAAAGGAGAC AAAAAGCTCG ATGACAGCTC CAGGTCTGCT GAAGATGTCA AGAATCTGTA 180  
 TTAATATACA GCAAGAGAGC ATAATTGTNT GTCCATCTTC CAGAGCAGCG AAAAAATGGAG 240  
 GGATAAN 247

40 SEQ ID NO:2677

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03118

## SEQUENCE DESCRIPTION:

45 GATCAAAACC ATCTGGCCA AAATGGTGAA CCCTGTCTCT ACTAAAAATA CAAAAATTAG 60  
 CTGGGCATAG TGGCACGCGC CTGCAGTCCC AGCTACTCAG GAAGCTGAGG CAGGAGAATC 120  
 GCTTGAACCC AGGAGGCAGA GGTGCTGTG AGCCGAGATT GCACCACTGC ACTCCAGCCT 180  
 50 GGGCAACAGA GTGAGACTCC ATCTGAAAAA AAAAAANTNC AGGCNTGCAA GNTTGGCGTA 240  
 ATCAN 245

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SEQ ID NO:2678

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03119

SEQUENCE DESCRIPTION:

GATCAGCAGG GCTACCATCT CACTCTTCTG TAATTCACA ACATTCTAAA GGAAGTAAAT 60  
 CACCAGATT GCTGATGTAT CAGGGTCCAC CAGACACTGC AGAAATAATA AAAACATTAC 120  
 CTCAGNAATA CAGNAGGAAA CTTGTGTCTC AAGAAGAAAT GGAATTTATC CAACGTGGAG 180  
 GTCCTGAATA ACCATGGTGG CTGCTGTTTG TCATCAGACA NTAGAATTGT CTTACAATA 240  
 AAGGNCTCC AAAATGGCAG ATGNGAAACT GTATATTAAC CACCTTTAGT AANTANTATG 300  
 GANNAAGTGN NATNTAGGNN ATTTAGGTGG TCCCTNGGAT TNCCGNN 347

SEQ ID NO:2679

SEQUENCE LENGTH:242

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03120

SEQUENCE DESCRIPTION:

GATCTGGCCT GGAGAGGCCA TCCTATACCC CTTATTAGAG CCATGACAGC CTACAGAGTG 60  
 AGGTGAGGTG CTCCACCTT CCCAGATGGT TCCTTTCTGC CCCTTCCTGG AAGGAAAGGT 120  
 GAGGCTGCCA ATAGCCTCCT GGCACCAGCC AGACCTCACC CTTGACCAAC CTCTCGGGGC 180  
 TGGGGGTTC TTTCTGGGGC ACTGTGGCCT GGTTTTGCTT TGAAACCAAG AAAGAGCAAA 240  
 GN 242

SEQ ID NO:2680

SEQUENCE LENGTH:411

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03121

SEQUENCE DESCRIPTION:

GATCCCCAAC AATGTGAAAA CGGCTGTCTG TNACATCCCA CCTCGGGGGC TAAAAATNTC 60  
 CGNCACCTTC ATTGGCAACA GCACGGCCAT CCAGGAGCTG TTCAAGCGCA TCTCCGAGCA 120  
 GTTCACGGCC ATGTTCCGGC GNAAGGCCCTT CCTGCACTGG TACACGGGCG AGGGNATGGA 180  
 CGAGATGGAG TTCACCGAGG CCGAGAGCAN CATGAATGAC CTGGTGTCCG AGTACCAGCA 240  
 GTACCAGGAT GCCACAGCCG AGNAGGAGGG CGAGTTCGAG GAGGAGGCTT AGGAGGAGGT 300  
 TGGCCTAGAG CTTTCAANTC ACTGGGGAAA AGCAGGGGAA GCAGTGTNGA ACTCTTTTAT 360  
 TCACCTCCNA GNCTGGTCCN NGTNGGNCTN GTTCCCACTG TGTGCAATTG N 411

SEQ ID NO:2681

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03122

## SEQUENCE DESCRIPTION:

GATCTGCCGA CGGTGCACAG CCCACCAGAG CACTACAGCC TTTTATTGAG TGGGGTGGGG 60  
 CAAGTGCTGG GCTGTGGTCG TGCCCTGACA GCATCTTCCC CAGGCAGCGG CTCTGTGGAG 120  
 GAGGCCATAC TCCCTAGTT GGCCACTGGG GCCACCACCC TGACCACCAC TGTGCCCCTC 180  
 ATTGTTACTA CCTTGTGAGA TAAAACTGA TTAAACCTTT GTGGCTGTGG TTGGCTGAAA 240

SEQ ID NO:2682

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03123

## SEQUENCE DESCRIPTION:

GATCACCTGG GGACAGAGGT GAAAGGCCTG CTGGGCCTGC TGGAGGAGCT GGCCTGGAAC 60  
 CTGCCCCCGG GACCCTTCAG CCCCGCTCCC GACCTTNTCG GAGATGGCTT CTNAGCCCTG 120  
 GAGCTGGAGC CCAGCAGTTG GAGGTGGTGC ACCTGCCAGG CAGCGCCAC AGAACCAGCC 180  
 CTGTCTCTC GACTTCCTTC CTTAGCTTCA TGTGAAATAA AAGCTATTCT GGTCAAA 237

SEQ ID NO:2683

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03124

## SEQUENCE DESCRIPTION:

GATCGGCATG GTCATTCACC AAGTGGAAGC CAAACCTCT GTGTATTTCA TCAAGTTTGA 60  
 TGATGATTTC CATATCTATG TCTACGATTT GGTGAAAAAG TCCTAACTGT TAGGGTAAAA 120  
 TTTGGACAT GTGTGGAAC AAATGTATAA TTTGTAGACA TGCAAAAAAT GTTGCCTTTC 180  
 AGTGTATTGA AAGCTTATGG AATCCCTGAT AACTAAACAT CTTTGCCAGC ATTAAA 236

SEQ ID NO:2684

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03125

## SEQUENCE DESCRIPTION:

GATCACACAT ATCCTTCCTG AGANGAGCAG TGAATAAAT GGAATATCTT TTAAAGANCA 60  
 GCTCCTCTTT AACAAAAAN CTAAAAAGAC AAATGTGAGA TGGGCTTAGA GTTAGTNCTC 120  
 TGGGAACCTG AAAGACATTT ATGCCATATT ATTTATNCAC GTGTTGTNC CTGGTGGGCA 180  
 AGATGCCATC TGAGGCTTCA GATGAGAAAT TGGGGTAANN TGAAATTTT NCACTN 236

SEQ ID NO:2685

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03126

## SEQUENCE DESCRIPTION:

GATCAATCCC TCAAGATTTT GAAATCCTGA AGAAATTGAG AAGTATGTTG CTGAAATTGA 60  
 AAANGAAAAA GAAGAAAAACG AAAAGAAGAA AAAAAAGAAA GCATCATGAT GAATAAAATG 120  
 TCTTTGCTTG TAATTTTAA ATTATATCA ATCATGGATG AGTCTCGATG TGTAGGCCTT 180  
 TCCATTCCAT TTATTCACAC TGAGTGCCT ACAATAAACT TCCGTATTTT TAAA 234

SEQ ID NO:2686

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03127

SEQUENCE DESCRIPTION:

GATCTAGGCC TGGCAAGANC TCTGGCCCCA AGGCCTCCTC TTCCCAGGGG CTGCCAAGTC 60  
 CTGGCCCTGG CCCTGGCATA TNACCCCGNA CTGTGGGGCC AGTCACCACT AGCCTGGCTC 120  
 AAATATTCCC CAGGGAGACT NCTGTGTGCT GCCCGGCTNC CTGCTGGCTC TCCCCAGNC 180  
 CCACATCCCN TCTNGAAGAG AATGTAAAT AACCTGGAC ACAAGGGAAA 230

SEQ ID NO:2687

SEQUENCE LENGTH:232

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03128

SEQUENCE DESCRIPTION:

GATCCATGAG GTCCTAGCCC CTGGCTGCCT GGATGCNTTC CCCCTGCTCT CAGCATATNT 60  
 GGGGCGCCTC ANTGCCGGC CCAAGCTCAA GGCCTTCCTG GCCTCCCCTG AGTACGTNAA 120  
 CCTCCCCATC AATGGCAACG GGAACAGTG AGGGTTGGGG GGACTCTNAG CGGGAGGCAG 180  
 AGTTTGCTTT CTTTCTCCA GGACCANTAA AATTTNTAAG NGAGNTACTA AA 232

SEQ ID NO:2688

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03129

SEQUENCE DESCRIPTION:

GATCACAAAA TGTNATAAAA CTTTAAATGT ATAAAACTTT ATCAAATAAA GTTTTATTTT 60  
 CCCCTTTAAA ATGTATTTNT TTAGAGGCAT TACTTTTTTA AAAATATTGG TCAATTNCNG 120  
 ACATAAGATG TGAGGTTTAC AGTTGTATTC CAGTATTCAA GATAGATTCC TGATTTTCCA 180  
 ATTAGGAAAA GTAAATCCA AAATGTTAGC AAAACAAAGT GCAATATTN 229

SEQ ID NO:2689

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03131

SEQUENCE DESCRIPTION:

GATCCCATGC CCAGGTGTCC AGCAGACCTC AAGGCAGAAG GGTCACCTAA CCCAGGAGTC 60



CACAGACTGA TGTGACCTCA GGTTCACACA TCANTGGCCA CAGGGCAGGG CCCACCTGGT 120  
 AGAAGTTTTC TGGATATGGC CAGGGTGGGT GTNTGGCTAA NTGGGCCTGA ACAGAGGGAA 180  
 CCTAGGGCCC TTGGCCAATG TGATTAAAGC TGCCATCTTG AAA 223

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SEQ ID NO:2690  
 SEQUENCE LENGTH:222  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03132

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SEQUENCE DESCRIPTION:  
 GATCCGCCCT GGAGAAGTGA GTGGCTGAGA CCCGGGTGGG GCCCTCCTAA CCTTGGNTCT 60  
 GGGGGCTTCC NTTCTGGGTC TTGTCCGGGA TATGGCCTTC CTGAAGGTCT TACCTCCCCC 120  
 AGCCGCCCTG CACTTGACCA CCAAGCAAT CTCTAAGCTT ATAAAGGAGA AACATGTATA 180  
 TATGGGGTTT TTTGGAGTAA AGGAAAATTC TAAGATATTA AA 222

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SEQ ID NO:2691  
 SEQUENCE LENGTH:222  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03133

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SEQUENCE DESCRIPTION:  
 GATCCACCTG CCTTGGCCTT CCAAGGTGTT GGAATTACAG GCGTGAGCAA CCGCGCCTGG 60  
 TCTATATGTN ATTTCAAATN AGGTGGCCTT ATAAATATAA GCAGATGGGT TTCTGGGCAA 120  
 AATCAAATNA TTTCTGTCTC TATTNNTTG AGTACCAATT GTAAAANCTG AAATTAGGTT 180  
 GAGGAAAGTN CTTTAGAAAT AATAAAGATG TACAANTACA AA 222

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SEQ ID NO:2692  
 SEQUENCE LENGTH:220  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03134

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SEQUENCE DESCRIPTION:  
 GATCTGCCCA CCTCAGCCTC TTGAGTAGCT GGGACTACAG GTGCATACCA CCACACCTGG 60  
 CTAATTTTTT AATTTTNATT TTTATTAAAG ACAAGGTCTC ACTATGCTGC CCAGGTTGGC 120  
 CTCCCAAAGT GTTGGGATTA CAAGTGTGAG TCACCGTGCC TGGTCCCATG TACTTGANGT 180  
 CATCACTANC AAAATGTATA GATATTGTAT AATGGCAACN 220

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SEQ ID NO:2693  
 SEQUENCE LENGTH:219  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03135

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SEQUENCE DESCRIPTION:  
 GATCTTTAAT AAAAATTGA TATGAAAAGC ACAATGTGCA GANGTTATGG AAAACCTATA 60  
 GAGGATTACA ACAGGTAAAC GTTAAAGAGA ATACATTGCT GACTTATAGT GATGTGGCTA 120

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AGANGTACAT GCTTTGTTGT AAAATTNCTT GAAAGCCCAT TGAAAGATGT ATCTGTTTAT 180  
TTACAGTCTT TGAAGTAAAA GTTACCAATG TTGCCAAA 219

5 SEQ ID NO:2694

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03136

10 SEQUENCE DESCRIPTION:

GATCTNGCCC CTGCGCTCTN GCCTGGGTGA CAGAGCAAGA NTCTATCTNA AAAATGTTTT 60

TAAAAAATAC TTCCTAGGGA AACACACATT TNGCCCTATT TGGAACITTG AAAAGTGAGC 120

CCTCCTCTGC CCATGGGCCG TGCTGCTCAG CCTGCCATAC TCGCTTGCTT TGCTGTTTGG 180

15 NATTTGCCTC CAGAATAAAG GTCTTTTTG TTGTTGAAA 219

SEQ ID NO:2695

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS03138

SEQUENCE DESCRIPTION:

GATCCTAATC CCTTCCTCTC CCATTCACCC TGTGTAACAG NACCCCAAGG ACCTGCCTCC 60

25 CCGGAAGTGC CTTAACCTAG AGGGTCGGGG AGGAGGTTGT GTCAC TGACT CAGGCTGCTC 120

CTTCTCTAGT TTCCCTCTC ATCTGACCTT AGTTTGCTGC CATNAGTCTA GTGGTTTCGT 180

GGTTTCGTCT ATTTATTTAA AAATATTGA GANCAAAAAA CAAA 224

SEQ ID NO:2696

30 SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03139

35 SEQUENCE DESCRIPTION:

GATCAAAGTC TTAAGTGTGT TTGCAGCTCA AAAATAAAGA TGTATTAAGG AGGGGAAAAC 60

CTGGTCTAAG TGCAAGGCAC ACTTACAGCG AGTTTACTT TCGGTTGTAT TTTCTTTGTA 120

TATNATAAAC ATTTATTTAA CTTGTTGCCG TTTGAAGTAA AAAATTTCCA AAATGTATGC 180

40 TCAACAATAA TCATTTAAAT GTTTTCAGCG TACAAA 216

SEQ ID NO:2697

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03140

SEQUENCE DESCRIPTION:

GATCAAATTG TGTTAGTAT CACTATCTTC TCTCCTCGTT TCTCTCTTAC TCCTCATCCT 60

50 CCCAGAATCT ACCAGTTTAT GGTAGAAAAG TGGGAACCTT ATTTGAATGT GTTTTTTTTT 120

TCCATGATGT CCAATTTTGT NGTGGGAAAAG GATTGGATA AAANTTTNGT TTAAATTNG 180

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GTAGNTTTTN ATCTNTACAA NTTTAANTAA AATNAN

216

SEQ ID NO:2698

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03141

SEQUENCE DESCRIPTION:

GATCTCAAAA GTATTCCTCA GGGTAGTCTC CATTCTGTGC ATTTTNCCTC CTATTCATGA 60  
 GACGGAAAAA TTATGACCAT GGTACAGAGT TGTATCAAGG AAATGAAGAA CTAGAACATT 120  
 GAATTGAAAG GTTTTGAAAG GGTTCACAAT TTCCTTTTCAT TTNCTATTAA TGTCTTCTTT 180  
 TAAATNCTCT TAAGAATAAA ACTTTTTTCT AATAAA 216

SEQ ID NO:2699

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03142

SEQUENCE DESCRIPTION:

GATCAGCAAA CAGGAATACG ATGAAGCCGG GCCTTCATT GTCCACCGCA AATNCTTCTA 60  
 AAACACTTTC CTGCTCCTCT CTGTCTCTAG CACACAACGT TGAATGTCCT GTGGAATTAT 120  
 GCCTTCAGTT CTTTTCCAAA TCATTCTTAG CCAAAGCTCT GACTCGTTAC CTATGTGTTT 180  
 TTTAATAAAT CTGAAATAGG CTACTGGTAA A 211

SEQ ID NO:2700

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03145

SEQUENCE DESCRIPTION:

GATCAGCAAC ANTAGCTTGC GCTCTACTCT GTAGTTATGT GGATTGCCGA GCAATNACCC 60  
 TTTTCAATNT CTTATTTCTG TGTACTGAG GACCCTAATC ACTTAGGGAT GTAATTTTAT 120  
 AGTATAAACT TTCTGNACAG TTTTCTNAT AGTCTAATAA GTAAAAAGTG TCCNNCAAAT 180  
 TATGATAATT GCCTATGGTA CATGGATAAN TTAANGCACT GCACACGGTG TAAANN 236

SEQ ID NO:2701

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03146

SEQUENCE DESCRIPTION:

GATCCATTTC TNACACACAC TGCCAGAGAT ACTCTAGGCA TGTAAGCAC AAACATACAT 60  
 ATAAAACTG CGGGCTTCAA AAAATATAAG TAGGATGTCA TCTATACTGT CATACACTTT 120  
 GTTTTTATC ACTTACTTAA TGTATATCT NGGATATTGT ATTACCCTGG GTATTAAAAA 180  
 GAACTCCTTT CACATTTTAA AATAAA 206

SEQ ID NO:2702

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03147

SEQUENCE DESCRIPTION:

GATCTAAAC TGGGGTTGG GGGAGGGTTT CANCECTCTCC CCACTCCNCT TGCCCCACAC 60  
CCTTTACTCC CCAGCCCAGA GAGACGCTGC TTTTACCAGG AAAGACTATT GAAAGATGTT 120  
TTATATTATT TTNCTCTGAC CTTTCCATCC TTGAAAAAAT GGGGAAAAAA GAAGAAAAAA 180  
GACAAAATCG ACCATAAAAG ACCAAA 206

SEQ ID NO:2703

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03148

SEQUENCE DESCRIPTION:

GATCTTGTTA ATGCATTTT GATGGGAAGA AAAGGTACAT GTTTACAAAG AGGTTTTATG 60  
AAAAGAATAA AAATTGACTT CTTGCTTGTA CATATAGGNG CAATACTATT ATATTATGTA 120  
GTCCGTAAAC ACTACTTAAA AGTTTAGGGT TTTCTCTGG TTGTAGAGTG GCCCAGAATT 180  
GCATTCTGAA TGAATAAAGG TTAAG 205

SEQ ID NO:2704

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03149

SEQUENCE DESCRIPTION:

GATCCTGAGG CTTTGATGCT ATTTTNTTAA TCCAGCTGGT CTGTGGAGAA GCCTGGGACA 60  
GAAAGAAGCA GCCAGACTCC AGAATCCCCC ATTTTAATAG CTATNNNATG CTATGTCCCC 120  
GTCTTATTC TGGCAACTTA CCTCTCAGCT CGTGCACTGT GACATTACAG CAAGAAGTAC 180  
TAATATAAAT GACACAAANG AAA 203

SEQ ID NO:2705

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03150

SEQUENCE DESCRIPTION:

GATCTGAAAA AAATACGGTT GAAAGTGGTG CAGGTAATTA CAATGTGTAG GCAAACCAGA 60  
AAACCATGGC TTTAACCAGC AGCTTTTGTN AGAAATNATT TCTCCAATGA NTGTAGAAAC 120  
GTTTGCNGCT GAATTGTGAC CTTNCCATTT NACCTGCTTT TCCTGCAAAG TATATTTNNC 180  
AGACCCAGGC AGTGCTGCTC GCN 203

SEQ ID NO:2706

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03151

SEQUENCE DESCRIPTION:

GATCCAATGC TAAACTCCAA TGGTTCAGTG ACTGTGGTTG CTCTTCTTCA AGGCAGCTGA 60  
TACCTGTGCA TACTGCAGGC ATCTAAATTA GAAGACCTGC GAGTAAAACT GAAGAAAGAA 120  
GGATATTCTA ATATTTNTNA TATNGTTGTT AATCATCAAG GNATCTNTTC TCGATTAAAA 180  
TNCACACATC TTANGAAA 198

SEQ ID NO:2707

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03152

SEQUENCE DESCRIPTION:

GATCCATAAT TCCTATTCAA TGAACATCAT TGTGGTGGC TGAATACATT TTGGAAGAGA 60  
GTTTTTCATC TTAGAGATTG GTGAACAAGT GTGAGGGTGT GAGAACTCA CAGAATACAA 120  
ATTTGCCGTGT ATGTTTTGTG GGTTTTTTTT TTCCCCTTCA NGATGTTTNC TATTNCTAAN 180  
TTAANGTAAT TNCAAGGTAA A 201

SEQ ID NO:2708

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03153

SEQUENCE DESCRIPTION:

GATCTATTAG TTTAGTGTTT ATNAAAGAAT CAAATGTATA GAATTACCAA GCATTCGTGG 60  
GGAATNCTGT GTAGCAAATG TAAACTNAC CTGCTCGGAA GAAACGTAGG ANCGCTTCAA 120  
ACCCACTGTA ATGTTTGGTT TGANNTTATT TCCATTGCTT TNAGAGTGAN CTGCCTAAGN 180  
GTAGGCCTTA TAATAN 196

SEQ ID NO:2709

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03154

SEQUENCE DESCRIPTION:

GATCTACAAG NATTTTCTTT TAGTAGTTAT ACAAAGANT ATTACATTTA TTGGTCTGTA 60  
CAGTGTAATA AACCAGCAAT AGGGACAACA ACAAAGAGAA TCTAAGAAAG ANGACTATGC 120  
CTAANTATAG GGAAAGTTTA GAGAATCATT TTTAGACAGG ACACATTTTG CAGTAGTGAA 180  
TGTGGTAGGT TTN 193

SEQ ID NO:2710

# EP 0 679 716 A1

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03155

SEQUENCE DESCRIPTION:

GATCAGTGTT GCAACATANT GNAAAAGATG GCTACTGTGC CTTGTGTTAC TTAATCATAC 60  
AGTAAGNTGA CCTGGAAATG AATGAAACTA TTACTCCTAA GANTTACATT GTATAGCCCC 120  
ACAGATTAAN TTTAATTAAT TANTTCAAAA CATGTTANCC GCNACTTTCA TGTACTATGG 180  
AAAAGTACAN GTN 193

SEQ ID NO:2711

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03156

SEQUENCE DESCRIPTION:

GATCTCGAAC CCTGTCTAGA AGGAATGTAT TTGTTGCTAA ATTCGTAGC ACTGTTTACA 60  
GTTTTCTCC ATGTTATTTA TGAATTTNAT ATTCCGTGAA TGTATATNGT CTTGTAATGT 120  
TGCATAATGT TCACTTTTAA TAGTGTGTC TTTATNCTAA ACAGTAANGT GGTTTTATTN 180  
CTATCACACA AA 192

SEQ ID NO:2712

SEQUENCE LENGTH:386

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03157

SEQUENCE DESCRIPTION:

GATCCAGAAT NGAGACTGGA CCTTCCAGAC CCTGGTAATG CTGGAAACAG TTCCTCGGAG 60  
TGGAGAGGTT TACACCTGCC AAGTGGAGCA TCCAAGCATG ATGAGCCCTC TNACGGTGCA 120  
ATGGAGTGCA CGGTCTGAAT CTGCACAGAG CAAGATGCTG AGTGGAGTCG GGGGCTTTGT 180  
GCTGGGCCTG CTCTTNCCTG GNACAGGGCT GTTCATCTAC TTCAGGANTC AGAAAGGNCA 240  
CTCTGGNCTT CAGCCANCAG GACTCTTTGN GCTGAAGTGC AGGTGNCCAC GATTCAAGGG 300  
ANGAACCTTC TTGNCCCANG NTTTTCAAGA TGGAAAAGCT TTCCCAACT TTGGNTTCTT 360  
NTTNTTCCC ACCAAAGAAAN CTTNAN 386

SEQ ID NO:2713

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03159

SEQUENCE DESCRIPTION:

GATCTTCCGG AAAAATAAG CCCCTCCTT ACCCCCGCAC ACCTGCATCC CTGCCGGAGT 60  
CNTGNTGAGG CACGAACCTT GCCTCCCTAG GCCGGACCTT GTGGACGACA GCCCCACCCA 120  
GTCTGTGCTC TCAGCCGCTG GCCGAAGGCC CAGCCTGCTC AGAATAAAGC ATGTCTTGCT 180  
GCCGGCAAA 189

SEQ ID NO:2714

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03160

SEQUENCE DESCRIPTION:

GATCCCATAG TTTTACATTT TNCCTGTITA TTTTGATTTT TTNCACTGCT TTATTTCTTA 60  
AAGTNC TAGC ACATCTGTNA CTCCTCCACT TCCACATTTT TNCAGTCTT ACAGTTACGT 120  
GCAATCTTAT TCCTNGTCTG CACACACATG TGGAAAGCTA GAAATAAATG TTAAAACTNA 180  
CTTTTAAA 189

SEQ ID NO:2715

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03162

SEQUENCE DESCRIPTION:

GATCAAACTC CTCCTGGCTG TAGTAACCCA GTGGAATGAA TTTGGNCATG CCCCAATGCT 60  
TCTATATGCT AAGTGAAATC TGTGTCTGTA ATTTGTTGGG GGGTGGATAG GGTGGGGTCT 120  
CCATCTACTT TTTGTCACCA TCATCTGAAA TGGGGAAATA TGTAATAAAA TATATCAGCA 180  
AAGCAAA 187

SEQ ID NO:2716

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03163

SEQUENCE DESCRIPTION:

GATCCAAGGG CACAAGGAGA TGAGCAAGGT GTGGAACGAC CTGAGGCCCA AGCTCAGCTG 60  
CCTCTTTGCG GGACCACACA GCACCCTGAC CCCACCGTGC TCCNNGNCGG AGGACGGCCT 120  
GTGTCCTCAN TAGCGCCTGA GGCTGNGGTG GTGCTCCCTG CGGNCGCACT AAAACCTCTT 180  
TNCNAAA 187

SEQ ID NO:2717

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03164

SEQUENCE DESCRIPTION:

GATCCTCCTG TTTACCTGT ACCTCCAATG TCTGGCACTT GTAGGTGCTC AAATATTCGT 60  
TGAATGAATG AAAAATCCAT ATTGTAATTG ATGTCCTCTG GCCACATAGT TTTAAAATTA 120  
GGTGATTGAT TATATGACCG AATAGAACTA TCAAATGTTT TCCTAATAAA GTCAATATTT 180  
CAAACAAA 188

SEQ ID NO:2718

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03166

SEQUENCE DESCRIPTION:

GATCTGCCCC CCTCAGCCTC CCAAAGTGCT GGGNTTACAG GCATGAGCCN TCGCGCCCGG 60  
 CCGGATTTTT TTTTTTTT ATTACAGCTTA TACCAGGGCT GAAAACCTCA NTTATGTTC 120  
 ATGACAGTNG GGATTTTTT AAATGCCTAC ATTCTTTCTA ATAACTGTT GGAAGACNTT 180  
 AAA 183

SEQ ID NO:2719

SEQUENCE LENGTH:182

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03167

SEQUENCE DESCRIPTION:

GATCCAAGTG GCCCAGCAGA AACGGAATTN TNGTNAAAAT GACTGATTCT GGTGCATGTN 60  
 AAAGGCTCTG GGGAATNAAT ACCTGTTTGG TCCAACTTA CTGTATCATA ATGCTGTATA 120  
 TGTNGAAAAC GTAATACCTG TNAATGTCCT AATGAATCAN GTTTTGCGA AAACACCGTA 180  
 AA 182

SEQ ID NO:2720

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03168

SEQUENCE DESCRIPTION:

GATCCTCCAT TGGAGTGGCC CAATCTTTCC TCTAGGGCAA TCCTGAAAGC CCAAGGCCCT 60  
 TCNCAGTCTG GCCTTGGCTT CAGCTGGAGA AGGGTAACAT CAGTCATTGT CAAGGCACCN 120  
 CCANCCNGA CAGACCGTGT CTCTGATAAA GGTTTGAAG TGATAAAGTT TAAAACTAA 180  
 A 181

SEQ ID NO:2721

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03169

SEQUENCE DESCRIPTION:

GATCCTCACT CCACTGTCAT GTTGAAAGA GGTATTGGTG TTCTGGAGTG GGGGTCAACC 60  
 CCTCCCAGT CTCTGTGCTA AGTCACTTG GGAGGATGGC AGTAGGAGCC AGGGCTGGCC 120  
 ATGGGTCCCC TACGCTTNCC NNTAGGATAT ACCCTGGAGA ATGGCAAAAT GATTTAA 178

SEQ ID NO:2722

SEQUENCE LENGTH:287



SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03170

SEQUENCE DESCRIPTION:

GATCCTAAGG CAAAGAGGTG TTTTTCCTTC TGGTTGATTC ATCCCAAAGC TTTCCCACCC 60  
 AGGTTTTCTC TGAAAGCTTA GCCTTAAGAG AACACGCAGA GAGTTTCCT AGATATACTC 120  
 CTGCCTCCAG GTGCTGGGAC ACACCTTTGC AAAATGCTGT GGGAAAGCAGG AGCTGGGGAG 180  
 CTGTNTTAAG TCAAAGTAGA AACCTCCAG TNTNTGGTGT TGTGTAGAGA NTAGGNCATA 240  
 GGGTAAAGNG GCCAAGCTGC CTGTAGTTAG TAGAGAAGAN TGGGGAN 287

SEQ ID NO:2723

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03171

SEQUENCE DESCRIPTION:

GATCACCATG ACTGCAACAT GGTATATATT CATGCTGCCC TAGAACTTT TGTAATTATT 60  
 TGTGCAAAT TTGTGACTGT CCTTATTAAC TTTCTTNAT GTAAGTAATT TGTAAGATT 120  
 TCTNAAAATT TTTGCTTTTG CTTATTTAAT TTTNAATAAA AGCTAAATTC CTAATAAA 178

SEQ ID NO:2724

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03172

SEQUENCE DESCRIPTION:

GATCCTGGAG CCCCCGTGC GGGGGGCGAG GGGGGGCGG TGNCCGACGA GTTGANCTTC 60  
 TNAACATGAG TGCAACTTC AGGACTTGCT TCCAAGCCCT TCCCTCTGTT GGAAATTGGG 120  
 TGTGCCATNN CTCCAAGGN AGGCCATGT GACTAATAAA AAAGTGTGAA CCCTGAAA 178

SEQ ID NO:2725

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03173

SEQUENCE DESCRIPTION:

GATCCTTTTG AATTTGCAC AGCCCTAGAT ACAATCCCTT TTGATAAAAG GGTCTTTGCT 60  
 TCTNATTACA GGAGCACTGT GGAACGTCTG TAAATATGTT TTTATAATTC CATGTATAGT 120  
 TGGTGACAC TCAAACCTG TCCCCGGCAG CCAGTGCTCT CTGTATAGGG CCATAATGGA 180  
 ATTCTGAAGA AATCTGGGG AGGGAAGGGG AGTTNGAACA AATGTCTGTT CCCTGGGAGG 240  
 CCAGTCCAGT GCTCAGACCT TTAGACTCAT TGTAAGTTGC CACTGTCAAC ATGGGACCAA 300  
 AGGTGTGTGA CTAGTCAATG AAAGTGCGGN CANATTN 337

SEQ ID NO:2726

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03175

SEQUENCE DESCRIPTION:

GATCCAAAAC ACTCAATCCT CGTAAAAGGG TACAGGTCCT ATTGTATGTT AACACACGTG 60  
ATGATGTGAG CCATGTGAGA TGANCAATCA CCAGTTGTTA TGTTCTGAATC TCCTTTGTGT 120  
TGGGCCGCTT TAATGTCAGG GTTTCATAA ATAAATGAAT TTTCATATAC TGAAGTAAAA 180

SEQ ID NO:2727

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03176

SEQUENCE DESCRIPTION:

GATCTGAGCC AGGATGGGAG TGAATCCCAG GCGGAGGCCA GAGCTGGCAG CCAGCTCTGC 60  
CTTTCCACTG CCGGGAGTGC TGGGGGCCCA GCCTGGCCCC CNGAAGAGAC AGCCAAGTGT 120  
CGTCCACATA CTCCTCCCAG AGTGAGCTCT AACCAGGCTC ATTTGCTCTN TCCAN 175

SEQ ID NO:2728

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03177

SEQUENCE DESCRIPTION:

GATCCTGTTN CCNACCTCCT TCTCCTCCCC TGTACTCCCC AGTGCCTTCC ATTGCTCTGG 60  
TGGAGCTGGG GTTCTCTCCT TCCCAGTCC CACAACACTG CCAAAAATCT GTGTATGTNC 120  
CATTGGGTGG GGCAGCCCCA AGCCTCCTGG GGAGGCAGGG CAAAAACAGG TGCCN 175

SEQ ID NO:2729

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03178

SEQUENCE DESCRIPTION:

GATCAGAGGA AAGATGAGAA AGAGAACAAG CATACCTATC TNACTCCTTC CAGTGGTCTC 60  
TGTTCCCTCC GTCTCCTGGA CCACGGCTAG AGTTCCAGT TTGGCCTTTT GGGGCATTCA 120  
TCCCATCTAC TTTATTTTCA TCTGCTTGGG CAGTAATGTA AACAAATTAA AGGN 174

SEQ ID NO:2730

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03179

SEQUENCE DESCRIPTION:

GATCGTCTGG GAGCCCAGTG TCAAGTCTGC TGGAATGCAG GAAGTAGAAC AGAATCGCCA 60

5 CAGGACTGTT CTGGGGCCAG GTTCCCTTAA CTCTGTAGCC TGGCAGTCTG ACCCAAAGTT 120  
 GCCCTCACCC AAAGGTTCTG GCTCTTCCCT CCCTCACTTT TACTTTCCCT TCCCCCATAA 180  
 GTTGGAGGAT AAAATGGGTA TCAATGNTAA TTTTCCAGG GNGNCCATGN NNACCAGCGG 240  
 TTTCTNNCTN TCTCTGTAAT CTGCTATGNA N 271

10 SEQ ID NO:2731  
 SEQUENCE LENGTH:178  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03180  
 SEQUENCE DESCRIPTION:  
 15 GATCTNCGGN CTGTCGTTAG CAGGCTTAAT NAAGAACACT TCTCAACAGT TTCCTTTTTN 60  
 TTTTCTTTA TAATTCATA AAATAAGCA TCTATTAGTG TCTGATTTAG GAATGTAAAA 120  
 TAATTCTNTA TTAATGTAAA TAAGATTATC TATTGCAAAA NGATATTTCA ANCCTAAA 178

20 SEQ ID NO:2732  
 SEQUENCE LENGTH:172  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03181  
 SEQUENCE DESCRIPTION:  
 25 GATCTTACCA AAGAGGTCAA CACATGGGAC CTTTGTGTCA CATGAACCAT TTTTTTTCCT 60  
 CTTCTATTAA GTGTATTNT GTTTAAGNTA CAGTTCTCTA AGAGAATTAC AATGTTTGTG 120  
 CCATTCTTAA GGGCTTCTNT TCAACTCTAA TAACAGCATT ATTCACGTTA AA 172

30 SEQ ID NO:2733  
 SEQUENCE LENGTH:170  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03182  
 SEQUENCE DESCRIPTION:  
 35 GATCAGGAAA CGGCAACAAG CCTCCCAGTA CTGACCTGAA AACTTGTGAC AAGAAGAACA 60  
 CCAACAAGTG CTCCTGGGC TGAGGACCCT TTNTTGCCTC CCCACCCCGG AAGCTGNACC 120  
 TGAGGGAGAC AACGGCAGAG GGAGTNAGCA GGGGAGAAAT AGCAGAGGGN 170

40 SEQ ID NO:2734  
 SEQUENCE LENGTH:176  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 45 CLONE:HUMGS03183  
 SEQUENCE DESCRIPTION:  
 GATCTGGATT TATGTATTG TNAGATACAT ACGAATTGTT AAAATGGAAT GCAAGTTTTT 60  
 CAAAAGCCCA GGTCTAAATG TAATGGTTGG TTTATNGTNC TATAACCCCA GCCCATCATT 120  
 TCCTGTGTAA ATCATAAACA ATAAACAGAA TATACTCGGT GGCCATTTCT AATAAA 176  
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5 SEQ ID NO:2735  
 SEQUENCE LENGTH:163  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03185  
 SEQUENCE DESCRIPTION:  
 GATCCGCCCA CCTNGGCCTC CCAAAGTGCT GGGATTGCAG GCGTGAGCAN CCGCACCCGG 60  
 CCTCCTGAAT TAACATTTTC TAAAGATGCC TCCGGCGTGC TATCCTGAAA GCTGCCAGAG 120  
 10 GTGTCTTGGC TGCATTGGTG GTAATAAAAT TCATACTCAT AAA 163

15 SEQ ID NO:2736  
 SEQUENCE LENGTH:162  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03186  
 SEQUENCE DESCRIPTION:  
 GATCTCAACT ATGTNCCACT AAAGGCACAG GAATGGAAAA CTGAGAAAAG ATTTATTGGC 60  
 CTCACCAATT CCTTTGGTTT TGGTGGTACT AATGCAACAC TTTGTATTGC TGGNCTGTAG 120  
 AACATATANT TNGTAATNAA ATACTGATT TNAATGTTA AA 162

25 SEQ ID NO:2737  
 SEQUENCE LENGTH:160  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03187  
 SEQUENCE DESCRIPTION:  
 30 GATCCTGCCA CCCTGTAGCG CCAGTNTAAT CCCCCAGGAG AACATCTTTG AACTCTGCA 60  
 GACTGCTAGT GTTCTGTCTA AAAACCAGAC AAGGAAATAC CCTTCTTTTA TGAGCAGAAG 120  
 GAAACAAAAA AAAAAANGAG GCCCNTTTNC CTGGANGAAA 160

35 SEQ ID NO:2738  
 SEQUENCE LENGTH:159  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03188  
 40 SEQUENCE DESCRIPTION:  
 GATCTGCCTT ATTGCATATN CCATGCATCA GATAATGGAT GCATCAGATA ATGGNGTTAG 60  
 ACAAAGCTTC ATTGTGAACA ACCTAATGCA TTTNNGAGAA ACANTCTCAT CACATTTTTC 120  
 CTAGCCTTNC CTACATTAA NCTTGCTGTT GCCCAAATN 159

45 SEQ ID NO:2739  
 SEQUENCE LENGTH:157  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS03189

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## SEQUENCE DESCRIPTION:

GATCAGANGT TTCACTTGTT TCTCAGTTAT TGGATATGTA TCTTTGTGTA CATATCTTTG 60  
 CAAAANTGGA TAAGTACAAA NCTTGATGTA AATNGTACCA ATGANTATGT AAACATACAG 120  
 TGACANCATT AAACCTAGAA AAGTTTAACTTAAA ACTTAAA 157

SEQ ID NO:2740

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03190

## SEQUENCE DESCRIPTION:

GATCCACTGG AATTAGCCAA TACACTATAT AACAATACTA TTAAAGTATT TTTTCCTGGA 60  
 ATATAATTGG TATATGTCTT CCACCTTTCCA TCATGTATGT AAAATTTCAT AGTAAACTT 120  
 CCTGATAGTT TCAATAAAGA AATNATCTGC AAA 153

SEQ ID NO:2741

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03192

## SEQUENCE DESCRIPTION:

GATCTTNAAT GCTTTGGAAA TGCGTGTAAAC AGTACTGCAA TAATCACAGC TCTGGGAAAA 60  
 ACAACGAAAC TTTCCCTTGT GGAGAGGAGG GATTCCCTG CTCTATATAA GCAACATATT 120  
 TTNAGACATT AAAATATGGT ATNCNNNNCC N 151

SEQ ID NO:2742

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03193

## SEQUENCE DESCRIPTION:

GATCTTNCTN ATCCAAGCAA TAACGGGACG AGGGAGCCAG GGCCAAGGAC ACTCAGGGAC 60  
 ACTGTTGGGG CAGCGGCCCC ACATGGTAAT GTTTTNTTTA GAGAGAAGAA AAAACAACCTG 120  
 GCTGTAAACG TAAATNATAT TTNTTGAAA 150

SEQ ID NO:2743

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03194

## SEQUENCE DESCRIPTION:

GATCGTNTTT TTNCTTGTTA AATAATTAAA ANTCATCTTA AAATTCATAC TTGACTTTA 60  
 ATTTAGACAC AAGGAGATGT AATCNCTGTG TAACATCAGA GAAAGCTATA TGGATTATNG 120  
 TCAGANGTAA ATGTTTCTAA CATTGACAAA 150

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SEQ ID NO:2744  
 SEQUENCE LENGTH:149  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03195  
 SEQUENCE DESCRIPTION:  
 GATCGAGTTG GCCGAGGATG GATGATTNTG NGCAGCAGAA GCCGTTGCAG CCCCACGTTG 60  
 TGCTCTAGGC AGGGACCTTT GGCCCCCTTTG GGGAGGGAGA GACAGACGGG CGGTTTGACT 120  
 TGGACACAAA GAAAGCCTTG GTTCTAAA 149

SEQ ID NO:2745  
 SEQUENCE LENGTH:145  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03196  
 SEQUENCE DESCRIPTION:  
 GATCCCAGGT CTGGGGATGG GGGACACCTT NGGCCACAGG ATACTGGTTG CTCAGGGGT 60  
 ACCCATGCCC NCTGCCCTNG CCTGGAATCA GTGTTACTGC ATCTGATTAA ATGTCTCCAG 120  
 AAATAAGAA TAATTCTGCC AGAAA 145

SEQ ID NO:2746  
 SEQUENCE LENGTH:143  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03197  
 SEQUENCE DESCRIPTION:  
 GATCACTCNT AGAGTNGCCA TTCTGCANCT TCCTAAAAAT ATTTAAAAA TACATTTATT 60  
 TTACTAAATA CTGACTACAT TTNTNTGTTA ATATTGAGCT AAATGTATAA AAATGGCCAG 120  
 ATTAAGAT ATCAATTTGT AAA 143

SEQ ID NO:2747  
 SEQUENCE LENGTH:142  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03198  
 SEQUENCE DESCRIPTION:  
 GATCCATAGT GTGCATGGG AGACACATTT TGCCTCTATG TCTCTAAAA TTTAATTAA 60  
 AAATACTCTT TCCAGTAATC CTAATTTGCA CGAAGATATA ATGTCCACAT TACGTGCCTT 120  
 GCCTTGAAAT CTAATAAACA AA 142

SEQ ID NO:2748  
 SEQUENCE LENGTH:142  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03200

## SEQUENCE DESCRIPTION:

5 GATCTCACAG GACTGAGAAC TCGTTCACCT CCAAGCATT CATGAAAAAG CTGCTTCTTA 60  
 TTAATCATAC AAACCTCTCAC CATGATGTGA AGAGTTTCAC AAATCTTTCA AAATAAAAAAG 120  
 TAATGACTTA GAAACTGCCA AA 142

SEQ ID NO:2749

SEQUENCE LENGTH:141

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03201

## SEQUENCE DESCRIPTION:

15 GATCTTTTCA TTTCTTACTA GCTTTTAAGA AATNAAATAC TTGCCTGAGA TAGAAATACT 60  
 TTATTTTTGT AACTTTAAGG TCTAAATNAC TAACTTCAA AGTAAGATTT TNTCAGAATA 120  
 AATTGAGACC ATTAATCTAA A 141

SEQ ID NO:2750

20 SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03202

## SEQUENCE DESCRIPTION:

25 GATCAGAAAA AGAAAGAAGC CAAAGAGAAA GGTACCTGGG TTCAACTANA ACGCCACCTT 60  
 GAGCTGCTGG AACCTATTCC CTATGAATTC ATGGCATAAT AGGTGTTAAA AAAAAAANA 120  
 AAGGACCTCT GGGNTACAAA 140

30 SEQ ID NO:2751

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03204

35 SEQUENCE DESCRIPTION:

GATCCTATTT TCNTACAACC TTTCAGTGAC ATCGTTCAGG NTTCTTTCTT GGCCATTTAA 60  
 AAAACAAAT TTTTTTTTNC TCACTTGTA GTCACCGCCA GTNCCTAAGT NAGGCTAACG 120  
 GNGACTTTGA CAGGN 135

40 SEQ ID NO:2752

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45 CLONE:HUMGS03205

## SEQUENCE DESCRIPTION:

50 GATCAGTAAT AGATNTAGAT ATACTATTTT NATATTGTAA GCAGTTACNT ACTCAGGATT 60  
 AGNATTCGAA TTCATTTGAT TTAATATGTA ATAGGTAATA TTTAAANTAA AGATTTTATG 120  
 CTTTGAAACT CAAA 134

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5 SEQ ID NO:2753  
 SEQUENCE LENGTH:133  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03206  
 SEQUENCE DESCRIPTION:  
 GATCAGACGT CGCTGAGGGG CTGTNCACCA CCATCCTCGT TCTCCAGGGT CAAGGAAGTG 60  
 10 TTTAACATG TCGTGTTC GACTTGACCT TGTGGTATTT TNCTNGGCCT AGTTGTGTGC 120  
 CATGGATATT AAA 133

15 SEQ ID NO:2754  
 SEQUENCE LENGTH:141  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03207  
 SEQUENCE DESCRIPTION:  
 GATCACTGTA GTTAGTTCT GTTGACCTGT GCACCTACCC CTTGGAAATG TCTGCTGGTA 60  
 20 TTTCTAATTC CACAGGTCAT NAGATGCCTG CTTGATAATA TATAACAAT AAAACAAC 120  
 TTCACCTCTT CCTATTGTAA A 141

25 SEQ ID NO:2755  
 SEQUENCE LENGTH:132  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03208  
 SEQUENCE DESCRIPTION:  
 30 GATCGTTATA TTNACATAA TATAACAAA ATNACTAATG CATCTATATN CTTGGTTTCC 60  
 TTAACATACA ATNAACCACA GAATGGGTGA AAATGCAGGC ATGCACGCTT GCGTAATCA 120  
 TGGATGNNGC TN 132

35 SEQ ID NO:2756  
 SEQUENCE LENGTH:131  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03212  
 40 SEQUENCE DESCRIPTION:  
 GATCCGNCCG CTCAGCCTC CCTATATGTT TAAAAATATA ANTTATTCT TATAAANTA 60  
 AATTNAANCT AGATTGAGGT AGTAATTACA ACAGTCCAGC ACATTATGGA TAATTAATAT 120  
 TNATATTTAT N 131

45 SEQ ID NO:2757  
 SEQUENCE LENGTH:136  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS03213

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## SEQUENCE DESCRIPTION:

GATCTGATAT TTTAAGANTT TGGAGACCAT TTCCTGTGCC AGANTCACTG CTCTATTCCA 60  
 TACCGTGCCA TGGAGGCTGT TTTAGAAGTG GTTGGATAAC ATGTTAAATA AAATATTAAG 120  
 TGTAAAAAAA AATAAA 136

SEQ ID NO:2758

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03214

## SEQUENCE DESCRIPTION:

GATCCACCCA CCTTGGCCTC CCAAAGTCCT GGGATTACAG GTGGGAACCA CAGCACCTNA 60  
 CCCAGAATAT AAAGACACTT TTNTAATGTG CAATGAAAAA TATGTAAATA AANTATTTTT 120  
 ATCTNTAAA 129

SEQ ID NO:2759

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03215

## SEQUENCE DESCRIPTION:

GATCCACCGT ACCAGGNAGC AGAAATATTT CTACAAAGGG GGCCTAGTTT GGAATGAGAA 60  
 CANNTCTGAC GGCCGGTATG TGAAGGAGAA CTGCAACCT CTGAAGAGTT ACATGCTCCA 120  
 AGACTCCCN 129

SEQ ID NO:2760

SEQUENCE LENGTH:408

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03216

## SEQUENCE DESCRIPTION:

GATCATGTTG GGATTAACCT GCCTTTTTCC CCAAAAANNA AACTCTCAGG CAAGCATTTT 60  
 TTAAAGCTA TTAAGGGNGT ATATACTTGA GTACTTATTG AAATGGACAG TAATAAGCAA 120  
 ATGTTCTTAT AATGCTACCT GATTTCTATG AAATGTGTTT GACAAGCCAA AATTCNNGGG 180  
 TGTAGANATC TGGAAAGTTC ATTCCTGGG ATTCCTTCT CCAGGGATT TTTAAAGTTA 240  
 ATTTGGGAAA TTANCAGCAG TTCACCTTAT TGTGAGTCTT TGCNACATT GACTGAATTT 300  
 AGCTGTCATT TGTNCATTTA AAGCAGCTGT TTTGGGGNCT GTGAGAGTCC ATGTATTATA 360  
 TCCAAGCCCA CCAGGGCTTN CCCTAAGGAN TTGCCATNGT AATACCCN 408

SEQ ID NO:2761

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03217

## SEQUENCE DESCRIPTION:

GATCTAGGAA AGAAGGCAAC TGAAAAACCT GAAAGAAAAA AAATNAAAG TTAAGATAT 60  
 ACGATATTCT ATTTTGATT AGCAATTACT TGTTNCNAG TGTNCTGTNA ATTTTGGTN 120  
 ACTTTAAN 128

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SEQ ID NO:2762  
 SEQUENCE LENGTH:258  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS03218

SEQUENCE DESCRIPTION:

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GATCGGCAGG CTGAGGACCA GGTCTGAGG AAGCTGGTGG ATTTGGTCAA CCAGAGAGAT 60  
 GCCCTCATCC GCTTCCAGGA GGAGCGCAGG CTCAGCGAGC TGGCCTTGGG GACAGGGGCC 120  
 CAGGGCTAGA CGAGGGTGGG CCGTCTGCTT TCGTTCCAC AAAGAAAGCA CCTNACCCCA 180  
 GCACAGTGGC ACCNTGTTC ATCTGGGCTG NCTGGCAGAG AGCCTTGCTG TTTACAATTA 240  
 AAATGTTTCT GCCACAAA 258

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SEQ ID NO:2763  
 SEQUENCE LENGTH:128  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03219

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SEQUENCE DESCRIPTION:

GATCCTTGTG GGTCTAGCTA AATACTGTGA GGGGAGTGTG CCCCATCTCA TCATTTCGAA 60  
 GATAGCAGAG TCATAGTTGG GCACCCAGTG ATTGGGTTC AAAATAAGC TGGTCTGCCT 120  
 CTTCTAAA 128

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SEQ ID NO:2764  
 SEQUENCE LENGTH:126  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03220

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SEQUENCE DESCRIPTION:

GATCTNCCGC TCCCTCCCTG AAGGGCATGG GGCCAGGGNA GTCTGGACAG CCGCCCCCAG 60  
 CCTGCTGACC CCCAGCTTTC TACAGACACC ANATTGTAA ATAAAGTTGG GGAATGGACA 120  
 GCCAAA 126

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SEQ ID NO:2765  
 SEQUENCE LENGTH:126  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03221

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SEQUENCE DESCRIPTION:

GATCTTTTGA GGCCTTCATT TTATGTTTT CCTTAAGTGT TATATTATNA TTGTAACATA 60  
 GATTATACTA CTAATAATTN NTGGATGTNT CAAAAGGTCA AGAAGTAAAA NATGTTAGAA 120  
 AGCAAAA 126

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5 SEQ ID NO:2766  
 SEQUENCE LENGTH:125  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03222  
 SEQUENCE DESCRIPTION:  
 GATCTCTGCA CAGTTTCTTG TTTAGTCTTA TGCCTTTTAG TTGAAAAACA AATTGTATTT 60  
 TTTTCCTNCT AAGTTTCATG GCCCTAGAGA AGAAGCCAAT NTNNTAAAG ATGTTATCCC 120  
 10 NGAAA 125

15 SEQ ID NO:2767  
 SEQUENCE LENGTH:124  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03223  
 SEQUENCE DESCRIPTION:  
 GATCCTGGTT TCAATGACGG TTGAAATAG AAATTNCCAG AGAAGAGAGT ATTGGGTAGA 60  
 20 TATTTTCTCT GAATACAAAG TGATGTGTTT AAATACTGCA ATTAAAGTGA TACTGAAACA 120  
 CAAA 124

25 SEQ ID NO:2768  
 SEQUENCE LENGTH:131  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03224  
 SEQUENCE DESCRIPTION:  
 30 GATCACTTAG CAACATGCTT GGNAATTTGG NATCTNTAAA GGTAGGAGAG TGGTGAACAG 60  
 ATAATCTATG CATATATNAC TAGTGCCAAG ACATAAAGCG GGGGAAAATA TATTTTANCC 120  
 CAAACATTAA A 131

35 SEQ ID NO:2769  
 SEQUENCE LENGTH:123  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03225  
 40 SEQUENCE DESCRIPTION:  
 GATCAATTAC CTAAGTGTTC CTTGGTCTAT TTATGTATAA GAATGCTTTT TAAAGCACAT 60  
 GTCTCATTTT AAATNACGCA CAAACTGAAG ATGTTAATAA AATTTAAGAG TAATACAATG 120  
 AAA 123

45 SEQ ID NO:2770  
 SEQUENCE LENGTH:388  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
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# EP 0 679 716 A1

CLONE:HUMGS03227

SEQUENCE DESCRIPTION:

5 GATCCATTG TCTGGCAGGA GGTITTTGAT GATAAAGCAA CGCTTGCGCC AAGGCACAAT 60  
 AGTTGAAGNA TGGAAAGACA GCGCATATCC TGAGGAACTC AGTAGAGTCA CAGCATCTGG 120  
 CTTCCCTGTA ATCCTTTCTN CTCCTNGGTA CTTAGATTNG ATTAGCTATG GACAAGATTG 180  
 GAGGAAATAC TATAAAGTGG AACCTCTTGA TTTGGCGGT ACTCAGAAAC AGAAACAACT 240  
 TTTCATTGGT GGAGAAGCTT GTCTATGGGG AGANNNTGTG GATGCAACTA ACCTCACTCC 300  
 10 AAGATTATG GCCTCGGGCA AGTGCTGTTG GTGAGAGACT CTGGAGGTTC CAAAGATGTC 360  
 AGAGATATGN GATGACGCCT ATNACAGN 388

SEQ ID NO:2771

SEQUENCE LENGTH:219

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03229

SEQUENCE DESCRIPTION:

20 GATCGATGGA CCGTAAATAA GCTGCCATTA ACACATCTGG TTAGTGTGT AACATGACTA 60  
 ATAAACCGA ACGCCTGTTC CCCTTACCCG TGTGGGGGAC ACGCAGATGA GTGAATTGGA 120  
 ATGTCCAGCA GAGTTACCCT CCCAATTATA TGTTCATTTT GTATATTTTT TGGTCGGGGG 180  
 AAAAATTGAC CTGCAGTAAA AAAACCTTTG ACCATTAAA 219

25 SEQ ID NO:2772

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03230

30 SEQUENCE DESCRIPTION:

GATCAGCACA GGAAGAGCCT TCCTAAGCAT GTGGTCCCAG GGAAGGGTGA AAAGTAGGAG 60  
 TTATGAACGT AATCCACCTA CTACAATGTT GAATTAAAGT TATAATCTCA TAACCTCAAA 120

35 SEQ ID NO:2773

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03231

40 SEQUENCE DESCRIPTION:

GATCCGCCCG CCTCGGCCTC CCAAAGTGCT TGGATTACAG GCATGAGCCA CCGCACCCAG 60  
 CAAGAGTTAT TTNNTTAACT TGAAATTTTC TACTAGCCCT GGTGAAGTTC TGTGCTTAAA 120

45 SEQ ID NO:2774

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03233

50 SEQUENCE DESCRIPTION:

GATCCAAGGT GATACAGCTG GTAACGTATG GAGATGTTGG TAGTGAAATN CATGTACTTT 60  
TAGTNCCTTTC TATGGAATCT AGAGGNAGAA TACATGTACA AGAATATCGA CTACCGTCN 119

5 SEQ ID NO:2775  
SEQUENCE LENGTH:117  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
10 CLONE:HUMGS03234  
SEQUENCE DESCRIPTION:  
GATCCCAGCT GTGTGTCACC AGCAGCTTTC CCAGCTTCTC TGTGAGGGTC ACTGCTGCCC 60  
ACTGCAGGGT CCCTGAGGTG AAGTAAACGC CGGCGCTGGG CTTGGCCAGN CGGCAAA 117

15 SEQ ID NO:2776  
SEQUENCE LENGTH:115  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03235  
20 SEQUENCE DESCRIPTION:  
GATCATTCCC ATTTTCATAGG TTTTATTGT GGAATAGTCA ACTTAATATA GATTCACCTT 60  
CAATTTGCAT GTATAANGTA ATACTCAATA AAATTTTTTC CATTNATTTT NCAAA 115

25 SEQ ID NO:2777  
SEQUENCE LENGTH:217  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03236  
30 SEQUENCE DESCRIPTION:  
GATCCTGGGG TTGGTCTGCT TTGTGTATGG TACTTGAAAC CACGCTGTAA TTATTGTCCT 60  
GTTGCCAAAC AAAAGCCAGT CATGTAATC TAGAAGCAGT GACTGGTGGG GCTTTCTGAC 120  
AGTTCCATGC TGATGTATCA GGCCATCTGT GTCATGCTTA TGTATTATGG CAAGAAGAGG 180  
35 AAAACTGGAT TAATAAATAC GTTTNNNNN NGTTAAA 217

SEQ ID NO:2778  
SEQUENCE LENGTH:114  
SEQUENCE TYPE:nucleic acid  
40 TOPOLOGY:linear  
CLONE:HUMGS03237  
SEQUENCE DESCRIPTION:  
GATCCTNAGC AACGAACACC TGCCTTAGA AAAAGTGGAC AGCTTCTNCC AACCAACACC 60  
45 TACCCATGGN ACTGTATGCA ATTAACCTCT GGAAACGCCC CGTAAATNCN AGTN 114

SEQ ID NO:2779  
SEQUENCE LENGTH:113  
SEQUENCE TYPE:nucleic acid  
50 TOPOLOGY:linear

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CLONE:HUMGS03239

SEQUENCE DESCRIPTION:

5 GATCCAAAAT TACCTTAAAT GGAGTTAAGT AGGCTTTGCA CTAAATGGAT ATAAAAGAGG 60  
CTGCTCTGGNC TNCTATGAAA TNATGATTAA AATCCTTTGT GTTGTCTTTT AAA 113

SEQ ID NO:2780

SEQUENCE LENGTH:359

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03240

SEQUENCE DESCRIPTION:

15 GATCCTTAAA GAAGGTGTGG GGTCTTTCCC AACCTGAGGA TTTCTGAAAG GTTCACAGGT 60  
TCAATATTTA ATGCTTCAGA AGCATGTGAG GTTCCCAACA CTGTCAGCAA AAACCTTAGG 120  
AGAAAACCTA AAANTATATG ATTACATGCG CAATACACAG CTACAGACAC ACATTCTGTT 180  
GACAAGGGAA AACCTTCAAA GCATGTTTNT TTCCCTCACC ACAGCAGAGC ATGCAGTACT 240  
AANGCGATAT ATTTNTGATT CCCCATGTAA TTCTTCGGNG GNNGGNCAGT GCAGTNCCT 300  
20 TTCGGAAGCT TAAGATGGCC NTGNGGCCCTG NCCNNNNGGN CATATGCCCC TGAAGGGCN 359

SEQ ID NO:2781

SEQUENCE LENGTH:191

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03241

SEQUENCE DESCRIPTION:

30 GATCTAGGGC AGGCTGTCTT CCAGTCCATG TGTCTCGGT CGCCGTAGAC AGCGCTCTGG 60  
CTACCACCGT GAGGCTACTT GAACTGTGAG GGGCATCTGC CTAAACCAGA ATCTTTTGTC 120  
AGAAACCTTA ACCCAACAAA ACAATCTTG AGTAGTCAT GCCCGGCTCT TAGGAATTTT 180  
GTCTGTTTAA A 191

SEQ ID NO:2782

35 SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03242

SEQUENCE DESCRIPTION:

40 GATCACTCAA CAGCACTGTN ATGTATTATT TNNAATGAGG TGCCTTTTTT AACTGACCAA 60  
ATGCTGCCTT GTTTGGCCCC TAANTCAATA AAATATGTTA AAATTTGTAA A 111

SEQ ID NO:2783

45 SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03243

SEQUENCE DESCRIPTION:

50 GATCTAAGAA ATAGAATTAG GGAGAGTTTA CACTTACTTA CCTATATAAA AGCAGATTTT 60

55

CNTGGAAGAA ACCCTTTTTT TTTTTTTTTT TAAAAAGNA NCANCCAGN

109

SEQ ID NO:2784

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03244

SEQUENCE DESCRIPTION:

GATCCAGAAG CTGGTGGACG TCACCACGGC ACAGGTGTAA CNTCCATGTN CCGTGTGAGC 60  
 AGAGTCCCTA CCAACGGGCA GGTCTGCATC CGGGGAGAAT GCAGCTGCTT CTGGCGACAA 120  
 TCCTGCTAGT AAACACTGGT CTTCCGGTGAG CAACGAACAC TCGCCTGGGN TGGGAAACTG 180  
 CATGCCCCACT TTNTGGGAGG GGTTAGTGCA GGTGCCGTGG ACAAGGACA ACATTTCTNT 240  
 GGGGCTTTT AACTTTTATT CCTAAGACTC TAAAGGCGTT GATTCAACC CTCCTTCACT 300  
 CTGGCTTCTT CAGGNAACCC ACGTGGTCTC CTGTNAGNTN 340

SEQ ID NO:2785

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03245

SEQUENCE DESCRIPTION:

GATCTTTAAG ACAACAAGTT AGGTTCTAC TGGAGTTACC TGCCAGANTG GCCTCTTAAT 60  
 TAACTCAGGT AATGAAGAGC TAACTGTGTT ATAATCATCT NCCNNNTN 108

SEQ ID NO:2786

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03247

SEQUENCE DESCRIPTION:

GATCTGCTAA AAATGGCAAT TGTAAGATNA TGTGTATGT AATGTACATA TGGAGAAAGA 60  
 ATGTATTTTN TCCATTTCCT TAATAAATG TTATATATGG NTGCTAAA 108

SEQ ID NO:2787

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03248

SEQUENCE DESCRIPTION:

GATCTCTGAG GCTNCGGTCA CCACCCACAA GTTGTGGCCT TGGATACCAC ACTNCAGTTG 60  
 GGTGGTGATG GGGTNGTGCC TTCTAACTTT TNCNTATCT TTACCGN 107

SEQ ID NO:2788

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear  
 CLONE:HUMGS03249  
 SEQUENCE DESCRIPTION:  
 5 GATCAGTAAG GATGACTGGT GTTTCTGAC TTNACAAA TTACTTGTTT GTTTCATTA 60  
 AAAAAAAGC ATAANCTATG TTTCTNATTA CTATTAGAAT TATTAAATTT CAAAATGAAT 120  
 CAAA 125

10 SEQ ID NO:2789  
 SEQUENCE LENGTH:104  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03251  
 15 SEQUENCE DESCRIPTION:  
 GATCGATTCT NTGACACAAA CCCCACCAAT TGTNAATGCA AGTTTTTATT TGGCTGTATA 60  
 TACAATTAA GCTATTAATA TTTGTACAAT ATTTACAAAT NAAA 104

20 SEQ ID NO:2790  
 SEQUENCE LENGTH:104  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03252  
 25 SEQUENCE DESCRIPTION:  
 GATCATTACA TCTNAGATGT ACGTNGGTTT AGTCGGAAAG GTGGGACGAT TTGAAGGGGA 60  
 GGNACTTICA GGTCATAGGC GGATTAAAA ATGTCCTGAT TAAA 104

30 SEQ ID NO:2791  
 SEQUENCE LENGTH:104  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03253  
 35 SEQUENCE DESCRIPTION:  
 GATCCAAGCT ATGANATANC CAACAGTATT CAAGANGCAA CCAGCACCAT CATGTGATAA 60  
 TGGTACTATG GCATATATGC AACATTAAAN TTTTAANTTA GAAA 104

40 SEQ ID NO:2792  
 SEQUENCE LENGTH:132  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03255  
 45 SEQUENCE DESCRIPTION:  
 GATCCAGTCT TAATTTGAGC ATGAGAGCAA AATTTAGTCA TCTACACAAG AAGCAAAAGC 60  
 AAGGAATAGT TGTTGGGTTT TNGTTTTTTG GTTGTGTNT TTTTTGTTN GTTAGGNANG 120  
 ANGTGTTCCC GN 132

50 SEQ ID NO:2793  
 55



SEQUENCE LENGTH:102  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03257  
 SEQUENCE DESCRIPTION:  
 GATCCAGGTG GTGTTACATG TCCATTTCAT GTTTGGGGG CTTTAGCCC NACAAAACAC 60  
 CTTCAGTAGA GCCTTGATTA AAAGGAAACC TGNAGACTCA AA 102

SEQ ID NO:2794  
 SEQUENCE LENGTH:100  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03258  
 SEQUENCE DESCRIPTION:  
 GATCTTCCC TAGGGGGCCC TCTTACTCCT NCCTCTCTCC TCCTCCTTCC CCATTGCTGT 60  
 AAATATTNA ACGAAATGGA AAAGAAAAA AAAAGACAAA 100

SEQ ID NO:2795  
 SEQUENCE LENGTH:100  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03259  
 SEQUENCE DESCRIPTION:  
 GATCACACAT CAAGACTATC TACAAAANTT TATTATATAT TTACAGNAGA AAAGCATGCA 60  
 TATCATTAAA CAAATAAAAT ACTTTTATC ACAACACAAA 100

SEQ ID NO:2796  
 SEQUENCE LENGTH:98  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03261  
 SEQUENCE DESCRIPTION:  
 GATCTAAATA CAAAGGATAT ACAGTCTTGA NTCTAAAATA ATTTGCTAAC TATTTTGATT 60  
 CTTCAGAGAG AACTACTAAT AAAAATCTAA AAGGTAAA 98

SEQ ID NO:2797  
 SEQUENCE LENGTH:97  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03263  
 SEQUENCE DESCRIPTION:  
 GATCGTNCCT ATAAATAGTA GGACCAATGT TGTGATTAAC ATCATCAGGC TTGGAATGAA 60  
 TTCTCTCTAA AAATAAAATN ATGTATGATT NGTTAAA 97

SEQ ID NO:2798

SEQUENCE LENGTH:96  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS03264  
 SEQUENCE DESCRIPTION:  
 GATCACTAAA GTATATCTTT AATTCTGGGA GAAATGAGAT AAAAGATGTA CTINTGACCA 60  
 TTGTAACANT AGCACAANTA AAGCACTTGT GCCAAA 96

10 SEQ ID NO:2799  
 SEQUENCE LENGTH:93  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS03267  
 SEQUENCE DESCRIPTION:  
 GATCTGCTGT CTCGTCCTT CCTGGGTCCT AGCAGCTGTC CTGCAGCTGT CAGCAGGAGG 60  
 GCCTGGCTTT AATAAAGAGT GGACAACTG AAA 93

20 SEQ ID NO:2800  
 SEQUENCE LENGTH:93  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS03268  
 SEQUENCE DESCRIPTION:  
 GATCAAGTTC GAGGAGGCAG TCATCGCTCG AAACCGGGCC CTGGAGGGCC GCTNACCCTG 60  
 CCGGANATAA AGNATACAGA GAGCCCCTCC AAA 93

30 SEQ ID NO:2801  
 SEQUENCE LENGTH:89  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS03271  
 SEQUENCE DESCRIPTION:  
 GATCCATTCT TGTATTGATA GATATTTGAA TGTTCAGT TTTTCCTATT ATGAATAAAA 60  
 CTGCTATGAA CATTCTTGTA TAAATCAAA 89

40 SEQ ID NO:2802  
 SEQUENCE LENGTH:95  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 45 CLONE:HUMGS03274  
 SEQUENCE DESCRIPTION:  
 GATCGACAGC GTCCTGGCCT AGGGTGCCGG GGCCTGAAGG TCAGGGTCAC CCAAGCAACA 60  
 AAGTCCCAG CAATGAAGTC ATCCACTCCT GCAAA 95

50 SEQ ID NO:2803

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SEQUENCE LENGTH:84  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03279  
 SEQUENCE DESCRIPTION:  
 GATCTCTACA GAGAGAAGTG GAAAATGCTG TATCAAGGGT GGGCTTAGCT GTGCCTTTCC 60  
 AATAAAGATG TGAGAAGCTT CAAA 84

SEQ ID NO:2804  
 SEQUENCE LENGTH:79  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03281  
 SEQUENCE DESCRIPTION:  
 GATCTTTGCC CTTGGTATGC ATTTNTGGAC TCCACTGAAT CCTGNGAAAA AAAATTAAAC 60  
 TTCCTTCTTA CTTGCCAAA 79

SEQ ID NO:2805  
 SEQUENCE LENGTH:79  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03282  
 SEQUENCE DESCRIPTION:  
 GATCCTGTCA GTTCCATNAG CTATTCCTCT TTGGTTTGGC TTTTGTATAT NATTAAATA 60  
 ATNTTTAATT CCTTTTAAA 79

SEQ ID NO:2806  
 SEQUENCE LENGTH:77  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03283  
 SEQUENCE DESCRIPTION:  
 GATCAATTTT TATAAAAATC GAGACAGTTC TGTGGTTAAA TCTACAAATT AAAGGGAAAT 60  
 TAGAAGTTGG CGTGAAA 77

SEQ ID NO:2807  
 SEQUENCE LENGTH:77  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03284  
 SEQUENCE DESCRIPTION:  
 GATCTATTTT ATGCATATTG TTTATAAAGA CACATTTACA ATTTACTTTT AATATTAAAA 60  
 ATNACCATAT TATGAAA 77

SEQ ID NO:2808

SEQUENCE LENGTH:75  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 5 CLONE:HUMGS03286  
 SEQUENCE DESCRIPTION:  
 GATCTTCAGT AAGTCTCTCA GGCTCTCTGA GCTTGTTTCAT CCTTTGTTT GAAAAAATTA 60  
 CTCAACCAAT CCAA 75

10 SEQ ID NO:2809  
 SEQUENCE LENGTH:74  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 15 CLONE:HUMGS03289  
 SEQUENCE DESCRIPTION:  
 GATCCCTTCA CAGCAGTAAA CCAGCTCTTT GGAACCGATT CCATCACCCC AATAAAGGAG 60  
 CTCTTCACAG CAAA 74

20 SEQ ID NO:2810  
 SEQUENCE LENGTH:73  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 25 CLONE:HUMGS03294  
 SEQUENCE DESCRIPTION:  
 GATCTGTTTC TTTTAAATT TACACTTTN CTTTCGGTT TGCCGGAATA AACAGGACCT 60  
 TTGACATTG AAA 73

30 SEQ ID NO:2811  
 SEQUENCE LENGTH:66  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 35 CLONE:HUMGS03296  
 SEQUENCE DESCRIPTION:  
 GATCCATTCT AAGACTTATT GGCTGTTTGG AAGTGATAGC AAATAAAANC CACCTTGAAC 60  
 TGGAAA 66

40 SEQ ID NO:2812  
 SEQUENCE LENGTH:67  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 45 CLONE:HUMGS03297  
 SEQUENCE DESCRIPTION:  
 GATCCGAGGG GGAGGGGTGG GAAGGGGAGA AAATNAAATA AAAGATAATT ACTGAACACG 60  
 CCGNAAA 67

50 SEQ ID NO:2813

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SEQUENCE LENGTH:63  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03299  
 SEQUENCE DESCRIPTION:  
 GATCATTGAA TTTAAGGCCC ACCCCAAGTC CAGANTGACC TCGCAAGACC CTTAACTCAC 60  
 AAA 63

10 SEQ ID NO:2814  
 SEQUENCE LENGTH:62  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03300  
 SEQUENCE DESCRIPTION:  
 GATCTTTTGT ACTTNTNATA ACCTAATGTC AGACTAAGAA AAATAAAATA TCTGAGAGTA 60  
 AA 62

20 SEQ ID NO:2815  
 SEQUENCE LENGTH:60  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03304  
 SEQUENCE DESCRIPTION:  
 GATCCCTTCG AGACTAANTC TGTTACCAGT CATGAAACAT TAAACCTAC AAGCCTTAA 60

30 SEQ ID NO:2816  
 SEQUENCE LENGTH:68  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03305  
 SEQUENCE DESCRIPTION:  
 GATCTTTGTC TTTTGTGTCG ACAAAGCATT TATTTAATAA AGTTATGCAN TCAGTTAAAA 60  
 AAANCAAA 68

40 SEQ ID NO:2817  
 SEQUENCE LENGTH:58  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03306  
 SEQUENCE DESCRIPTION:  
 GATCAGATTT TTTATGCCAT CCTCATTAGT TTTCCAATAC AATATAAGTT GAAACAAA 58

50 SEQ ID NO:2818  
 SEQUENCE LENGTH:58  
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear  
 CLONE:HUMGS03307  
 SEQUENCE DESCRIPTION:  
 5 GATCTCAGAC TTCTGGCTTC CACAACTGTA ACAATAAATT TATGTCGTTT AAGCCAAA 58

SEQ ID NO:2819  
 SEQUENCE LENGTH:57  
 SEQUENCE TYPE:nucleic acid  
 10 TOPOLOGY:linear  
 CLONE:HUMGS03308  
 SEQUENCE DESCRIPTION:  
 GATCCACTGG GTGAATCCTC CCGCTCAGAA CCAATAAAAT AGAATTGACC TTTTAAA 57

15 SEQ ID NO:2820  
 SEQUENCE LENGTH:56  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 20 CLONE:HUMGS03310  
 SEQUENCE DESCRIPTION:  
 GATCTGTGGT CATTGTCCCT CTGCAGAATA AAGATTGCTC AGGCCTGCCT GGCAAA 56

25 SEQ ID NO:2821  
 SEQUENCE LENGTH:59  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03311  
 30 SEQUENCE DESCRIPTION:  
 GATCTTTGGT TTGTTCCAG GTTTGGTTAT TATNAATAAA GTTGCTGTGA ATACTTAAA 59

35 SEQ ID NO:2822  
 SEQUENCE LENGTH:56  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03312  
 SEQUENCE DESCRIPTION:  
 40 GATCTTCATT GGGGGATTGA GCAGCATTTA ATAAAGTCTA TGTTTGTATT TTGAAA 56

45 SEQ ID NO:2823  
 SEQUENCE LENGTH:54  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03313  
 SEQUENCE DESCRIPTION:  
 50 GATCTAAGAA ATAAAGAGAA ATGTTTCANT TTGCATTGAA ATAGGAAAAC GAAA 54

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SEQ ID NO:2824  
SEQUENCE LENGTH:53  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03315  
SEQUENCE DESCRIPTION:  
GATCATNACT GGCTTTGCGC ATCGAGGGGC CATTAAAGAG TCTACTTTTC AAA 53

SEQ ID NO:2825  
SEQUENCE LENGTH:52  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03318  
SEQUENCE DESCRIPTION:  
GATCTTTTA AAACGTGCAAG TGTGTAATAC TAGAGGTTGT TAGACCNTTA AA 52

SEQ ID NO:2826  
SEQUENCE LENGTH:51  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03319  
SEQUENCE DESCRIPTION:  
GATCTTGCCA CTGTAGTCCA GGCTGGGCTA CGGAGAGACC CTGCCTCCAA A 51

SEQ ID NO:2827  
SEQUENCE LENGTH:54  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03324  
SEQUENCE DESCRIPTION:  
GATCCTTGCT GATAAATATA ACCATCAATA AAGAAGCATT CTTTCCAAA GAAA 54

SEQ ID NO:2828  
SEQUENCE LENGTH:50  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03325  
SEQUENCE DESCRIPTION:  
GATCTCACCA CACTGCAACC TCTGGCGACA GAGCGAGACT TGGTTTCAAA 50

SEQ ID NO:2829  
SEQUENCE LENGTH:50  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03326

## SEQUENCE DESCRIPTION:

GATCCACCCA CTCTCTGAAA CTTCTTTGCT AATAAAACAT TCCTACTAAA 50

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SEQ ID NO:2830

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03331

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SEQUENCE DESCRIPTION:

GATCTTTTTT TTTCCTTACA GACACCCATA ATAAAATATC ATATTAAAAT TCAAA 55

SEQ ID NO:2831

15

SEQUENCE LENGTH:53

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03332

SEQUENCE DESCRIPTION:

20

GATCCAGGGG GAAATGCTGG AAGTCAATAA AACTGAGTTT TGAGAGCTTG AAA 53

SEQ ID NO:2832

25

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03356

SEQUENCE DESCRIPTION:

30

GATCCACATA AAAAGAAATG TGAAGTTTTC TTTTACTATC TTTTCATTTA TCAAGCAGAG 60

ACCTTTGTTG GGAGGCGGTT TGGGAGAACA CATTCTAAT TTGAATGAAA TGAAATCTAT 120

TTTCAGTGAA A 131

SEQ ID NO:2833

35

SEQUENCE LENGTH:431

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03374

SEQUENCE DESCRIPTION:

40

GATCTGCTGA TTGCATTATT TTAATTTGCT TTTCTGGGAA AGCAGTTTTG CTAAAAGCTG 60

TACAGACTTT TNCTTTTGTA CCTAGCAGTA CTTTATATAG TATAGCTTTG GGCCATGTAG 120

CATTTTAAGA CTCAATTTTA AAAAAATNATT AATCTGTTGC TGACTCTTAA TTCCTATTTT 180

AATATGTGTT TCCTTGAAGA ATTCAGGATA CAACTTCTTG TGTATGACAG CTTTCCTTCA 240

45

CACACTATTT TNGTGGGTGT GTATATATCT GATTGGGAA GAATTAAAA AACACATAGC 300

TTTTNAATTN GTTTGAAACA GACTTTCTGC CTGTGACATT TNNGCNTTAA NCCAATTAAA 360

GAAGCCAATG GCATTTTNGG TTTTATATNG TGTTTTCCAC TAGTATATCC CTGTGGATTT 420

GTTTGTGCCC N 431

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SEQ ID NO:2834

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SEQUENCE LENGTH:429

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03375

SEQUENCE DESCRIPTION:

GATCCCATGG GTGGCACATT GGGACTTCTN TCCCTCCCC ATCTACACAG AAGACTGTCA 60  
 CCATGCTGAC AGAAGCCTGT CCTTGTAAGG CCCAGCCTTC CAGGGGAACA CTCAGACATG 120  
 TTCATTCTCT TCCTGCTTCT GCTCTGGGCC GGTGGGTGGC TCTCAGAAAA TACTTGCTGC 180  
 TGGCAAAAGG CCTGTACTCA GGCATTGTCT TTGACTTGAT GTTGCCAAGG GACTGAGGCC 240  
 ATTGGCAGGC TTAGTACCAC CTGCTCCTCA TCTTAGGAGT CTCCTTTTCA AATAATTAGG 300  
 CTCTGTTCCC ATTTTAAAC TCTGATATTG GGCTTCACCT GTGACTGGAC ACTTTACTAG 360  
 AGGCCCATTT NCACTAAACA NTAAATCTA AATAAATTGG AAGGAATAAC AACNACAAAG 420  
 GGNTAGAAA 429

SEQ ID NO:2835

SEQUENCE LENGTH:427

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03376

SEQUENCE DESCRIPTION:

GATCTGGGCT TCCTNACTTC TGGAGAAGTG GCCATCCCAT GCCACCTTT NCCATGGAGG 60  
 AGTGGGCCCT GCCAGCTGCC ACAGCTGCAT GACCTGCTTC CCCACCCAC GGTGTCGTTT 120  
 TTTTTNAAA GGTACCTGT CCTCACTCAC CCAGCCAGCC CTTCAGGTGC NTTCTACTCC 180  
 CAGTGCCAAA GCCAGACCAC TGGGGTTTCC TGCTGCAGGA ATTGGGGGCT GGAACAGCA 240  
 GAGGGGATAG AAGTNTGGTG GAGGTGGAGT GGGCACGCNT TAGCCTACGG AAAGGNCCAT 300  
 TTTTGGGNC CACTGAGCTG CACTGGGATT TTTCANTTCT GGNCTGANT NCCTTTAGGG 360  
 NAAATAACAC AGCAGGACCN CGGTGGGGAT TTAAAGNACT TTTTTTNNA GATTNAAANG 420  
 GNTTCTN 427

SEQ ID NO:2836

SEQUENCE LENGTH:416

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03377

SEQUENCE DESCRIPTION:

GATCCTGATG CTGCCAGAGC CATTGTGGAT GCTTTACCAC CACCCTGTGA ATCTGCCTGC 60  
 ACAGTACCAA CAGACGTGGA TAAGTGGTTC CATCACCAGA AAACTAATG AGATTCTCT 120  
 GGAATACANG CTGATATTGC TACATCGTGT TCATCTGGAT GTATTAGAAG TAAAAGTAGT 180  
 AGCTTTTCAA AGCTTTAAAT TTGTAGAACT CATCTAACTA AAGTAAATTC TGCTGTGACT 240  
 AATCCAATAT ACTCAGAATG TTATCCATCT AAAGCATTTT TCATATCTCA ACTAAGATAA 300  
 CTTTTAGCAC ATGCTTAAAT ATCAAAGCAG TTGTCATTTG GAAGTCATT GTGAATAGAT 360  
 GTGCAAGGGG GNGCACATAT TGGNTGTATA TGTTCNCNT ATGTTAGGGG ATAAAN 416

SEQ ID NO:2837

SEQUENCE LENGTH:398

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03378

SEQUENCE DESCRIPTION:

5 GATCAAAGAT GAGGCCACAA GGACACCAGC AACTGAAGAG GCTGCCTACT TGGTATCAAG 60  
 ACTGAAGGAG AACTACGTTT TGCTGAGCAC TGATGGCCCT GGGAGGAACA TCCTGAAGTT 120  
 TAAGCCCCA ATGTGCTTCA GCCTGGACAA TGCACGGCAG GTGGTGGCAA AGCTGGATGC 180  
 CATTCTGACT GACATGGAAG NGAAGGTGAG AAGTTGTGAA ACGCTGAGGC TCCAGCCCTA 240  
 10 AGCCAGCCCT GCTCTGCCCTA AGTGTACTCC AGAAGAAACT CATCTCATCC AAATACACGC 300  
 TATTGAGAAG GCGAGCCTGA CCTCCCTCTT ACAGATAAAG TCAGCTTTCA GAGGCTCAGG 360  
 GTGGGGGGGC CTGCCCAGAG CCATAATGCT ACCCACCN 398

SEQ ID NO:2838

SEQUENCE LENGTH:408

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03379

SEQUENCE DESCRIPTION:

20 GATCGCACAC ATGCTTTGTT TGGAATATGG AGTGAACACA ATTATGTACC AAATTTAACT 60  
 TGGCAAACTT NCTATTGCCT GTCCCATGTG CATCTNATTT AAAATTTCCC CCATGGAAAT 120  
 CACTCTCCTG TTGACTATTT CCAGAGCTCT AGGTGTTTAG GCAACGTGTG GTGTCCTGAG 180  
 25 ANGGCCATAG CGCCATCATG GGCTGATTTT AATTACCAGG TCCCCCAGAA GCAGGTGGGA 240  
 GGCTCTGCTT CCTGCTGGCC GTTCTGCAGC CTGGACCTGT GGACCCTGGT TGTAAGNGT 300  
 AAATGTTTT CTTANGGAAA CCAGTGTAC CTTNTNTNAA CCTTTAAANT TTAATAATAN 360  
 TTTGGGGGAA NAAATTNCNG NNACNGGAGG GTTAAATTT ANCNNANN 408

30 SEQ ID NO:2839

SEQUENCE LENGTH:388

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03380

SEQUENCE DESCRIPTION:

35 GATCCACCAG CTGAGCAGGG CGGGGCTGAG TAAATGCCGG CTTACCATCT CTACCATCAT 60  
 CCGGTTTAGT CATCCAACAA GAAGAAATAT GAAATTCAG CAATANGAAN TGAACAAAAG 120  
 ATTGGAGCTG AAGACCTAAA GTGCTTGCTT TTTGCCCGTT GACCAGATAA ATAGAACTAT 180  
 40 CTGCATTATC TATGCAGCAT GGGGTTTTTA TTATTTTAC CTAAAGACGT CTCTTTTGG 240  
 TAATAACAAA CGTGTTTTTT AAAAAAGCCT GGNTTTTCTC AATACGCCTT TAAAGTTTT 300  
 TAAATTGTTT CATATCTGGT CAAGTTGAGA TTTTAAAGA ACTTCATTTT TTAATTNGT 360  
 AATAAAAGTT TTNCAACTTT GATTTTAN 388

45 SEQ ID NO:2840

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03381

## SEQUENCE DESCRIPTION:

GATCTTGCTG AAAGTGTTC TAAAGATAGC ACCACTTTTT TTTNAAAAGC TTTTATATAT 60  
 NAAAAACGT ATCATGCAAA 80

5  
 SEQ ID NO:2841

SEQUENCE LENGTH:384

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10  
 CLONE:HUMGS03382

## SEQUENCE DESCRIPTION:

15  
 GATCTTGCTC TAGCCTTTTN ACTTTTGCAA TTTCAGTATC TTCATCTCTA AACTAGGGAA 60  
 AACTNGGAT TCTTCTTAG CTGTGGGGGA AGGTATTTGG TTAGATGACT TTGAATGAAT 120  
 AGACTGCTGT GCTGAAAGAG CTTTATCACA CTGTCTCAAA GTATGTAAAG ATACATAGGT 180  
 GGATGCTCTT ACTGCAGCAG TCATGAATAC ATTTTATGCC ATTTACCTAA GGAAAAAGAC 240  
 AGTTTTCTA GGTACCATGA AGGAAGATTG ACCCTGTTGG TATGCCTGTG GGGGTGGGAT 300  
 GTGAGTGGGA CTGATAAACT GATACTTTTG GTTCGTATGT ACATACTGGN AGAATCTTCA 360  
 TANTAAATGN GACTACACAA CAAA 384

20  
 SEQ ID NO:2842

SEQUENCE LENGTH:376

SEQUENCE TYPE:nucleic acid

25  
 TOPOLOGY:linear

CLONE:HUMGS03383

## SEQUENCE DESCRIPTION:

30  
 GATCCAGGGC AAGGCCATTG GGATATTCTG AAAGTTGAAT ATTTTGTTTT GTGCAGAGAT 60  
 AAAGACCTTT TCCATGCACC CTCATACACA GAAACCAATT TTNTNTNTNA TACTCAATCA 120  
 TTTCTAGCGC ATGGCCTGGT TAGAGGCTGG TTTTCTCTCT TTTCCTTTGG TCCTTCAAAG 180  
 GCTTGTAATT TTGGCTAGTC CTTGTTCTTT GGAAATACAC AGTGCTGACC AGNCAGCCTC 240  
 CCCCTGTCCC CTCTATGACC TCGCCCTCCA CAAATGGGAA AACCAGACTA CTTGGGAGCA 300  
 CCGCCTGTGA AATACCAACC TGAAGACACC GTTCATTGAG GCAACGNACA TAACAGNAAA 360  
 TGAAGGTGGA CANGCN 376

35  
 SEQ ID NO:2843

SEQUENCE LENGTH:370

SEQUENCE TYPE:nucleic acid

40  
 TOPOLOGY:linear

CLONE:HUMGS03384

## SEQUENCE DESCRIPTION:

45  
 GATCCCAAAC CTAGCCCCCT AGTGGGACAA GGACCTGACC CTCCTGCCCG CATAACAAC 60  
 CCATTTCCTC TGGTGAGCCA CTTGGCAGCA TATGTAGGTA CCAGCTCAAC CCCACGCAAG 120  
 TTCCTGAGCT GAACATGGAG CAAGGGGAGG GTGACTTCTC TCCACATAGG GAGGGCTTAG 180  
 AGCTCACAGC CTTGGGAAGT GAGACTAGAA GAGGGGAGCA GAAAGGGACC TTGAGTAGAC 240  
 AAAGGCCACA CACATCATTG TCATTACTGT TTTAATTGTC TGGCTTCTCT CTGGACTGGG 300  
 AGCTCAGTGA GGATTCTGAC CAGTGACTTA CACAAAAGGC GCTCTATACA TATTATAATA 360  
 TATTCGCTTN 370

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SEQ ID NO:2844  
 SEQUENCE LENGTH:367  
 SEQUENCE TYPE:nucleic acid  
 5 TOPOLOGY:linear  
 CLONE:HUMGS03385  
 SEQUENCE DESCRIPTION:  
 GATCTGTCAT CTGGTGCTGC CAGCTGTGCT CACTCTGGTT TTCTGCTCAG GGTCTGAAGC 60  
 10 AGCTGTCTGTC TNCCTCCTCT GCCCCCATCC CCTGGCTCTC CCCTGGGCAC AGTGCCACTC 120  
 CCTTGGAAGG GAGGGAACCA CCCGTNAGCC CCAGGGCTTG GNAAGCCTGA GGCGGTGNCT 180  
 CTGCCTCTCC CTGCCCCCAG CACAATTGGC AGAGATGAGG CGGGTGGTGG ACGGCTGGGG 240  
 GTGTCGTGGC AGGGTCTNGC ACAGGGNCAT GTCCTGGCTG TAACCCAGGC AGTGGGAGGT 300  
 CTGCAAGCCT GGTCAATGGCC TTCACAGCAN GGTNCCTGTT GGACAGACAT ATCTGNATAT 360  
 15 TTATNAA 367

SEQ ID NO:2845  
 SEQUENCE LENGTH:366  
 SEQUENCE TYPE:nucleic acid  
 20 TOPOLOGY:linear  
 CLONE:HUMGS03386  
 SEQUENCE DESCRIPTION:  
 GATCTCCAAC ACTATCCGAT AAAGTAGAAG CAACTGAGGT ACCGTGAAAG AGAAAGGAGC 60  
 25 TGGAAGTGAG AAAAAGCAGA GGATTCGGAC GGAGAGCGCG AGGACTCGGC GGCTGAGCGC 120  
 GCGGACAGC AGCTAGAGGC GCTGCTCAAC AAGACTATGC GCATTGCGAT GACAGATGGA 180  
 CGGACACTGG TCGGCTGCTT CCTCTGCACT GACCGTGAAT GCAATGTCAT CCTGGGCTCG 240  
 GCGCAGGAGT TCCTCAAGCC GTCGGATTCC TTCTCTGCCG GGGAGCCCCG TGTGCTGGGC 300  
 30 CTGGCCATGG TACCCGGACA CCACATCGTT TCCATTGAGG TGCAGAGGGA GAGTCTGACC 360  
 GGGCCN 366

SEQ ID NO:2846  
 SEQUENCE LENGTH:365  
 SEQUENCE TYPE:nucleic acid  
 35 TOPOLOGY:linear  
 CLONE:HUMGS03387  
 SEQUENCE DESCRIPTION:  
 GATCCCCCA AGGNGAAGTG TGAGACAATG GTCTATCACC CCAACATTGA CCTCGAGGGC 60  
 40 AACGTCTGCN TCAACATCCT CAGAGAGGAC TGGAAGCCAG TCCTTACGAT AAATCCATA 120  
 ATTNATGGCC TGCAGTATCT TTNCTTGAG CCCAACCCCG AGGACCCACT NAACAAGGAG 180  
 GCCGCAGAGG TCCTGCAGAA CAACCGGCGG CTGTTTGAGC AGAACGTGCA GCGCTCCATG 240  
 CGGGGTGGCT ACATCGGCTN NACCTACTTT NAGCGCTGCC TGAATAGGG TTGGCGCATA 300  
 45 CCCACCCNNG GCCACGGCCA CAAGCCCTGG GCATCCCCTG CAAATANTTN TTGGGGGGCC 360  
 ATGGN 365

SEQ ID NO:2847  
 SEQUENCE LENGTH:364

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03388

SEQUENCE DESCRIPTION:

GATCTAGAGT ATGTTGAAGA AGATGGACAT GTGGTGGTAC GAAAACAATT CCCCTGTGGC 60  
 CTGCTGGACT GGGTGAACC AGAACAGGCT AAGGCATACA GTTCTTGACT TTGGACAATC 120  
 CAAGAGTGAA CCAGAATGCA GTTTTCCTTG AGATACCTGT TTTAAAAGGT TTTTCAGACA 180  
 ATTTTGCAGA AAGGTGCATT GATTCTNAAA TTCTCTCTGT TGAGAGCATT TCAGCCAGAG 240  
 GACTTTGGAA CTGTGAATAT ACTTCCTGAA GGGGAGGGAG AAGGGAGGAA GCTCCCATGT 300  
 TGTTTAAAGG CTGTAATTGG AGCAGCTTTT GGCTGCGTAA CTGTGAACTA TGGCCATATA 360  
 TAAN 364

SEQ ID NO:2848

SEQUENCE LENGTH:363

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03389

SEQUENCE DESCRIPTION:

GATCTGGGGA GGCAGGCATT CCTGAAGGGA ACTAGAGGTG TTACAGAGGA CCCTTACGTG 60  
 AGAAATAGCT GAAAAGGGCA CTCGCAACCC TGGGCTGGGG AGGAGGAGAG AGTCCCAGAG 120  
 CTCATCCCCC CTGCTGCCCA GTGCAAAACCA CTTNTCCATG CTGCAAAGGA GAAGCACAGC 180  
 TCCTGCCAGG GTGAGCAGGG TCAAGCCTCT TATTCCAGGA GAAGGGGGCT CTGCCCAGGC 240  
 CCTACTACCN ATTGTNCCCT TCCTCTTCTT GCCCTTGGAA CCCCTNCT GTCCCAGGGC 300  
 CCTTCNAGCC CATTGCTGCC AAGGTGGAGG GANGGATAAA GNCACCTCTG GGTTTTGAAG 360  
 CCN 363

SEQ ID NO:2849

SEQUENCE LENGTH:361

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03390

SEQUENCE DESCRIPTION:

GATCTGGGTG TGGCCAAAAA CAATTTTNTT TATTCTGTCT ATCAAATAGT ACTTCTACCA 60  
 CTGTTTGGAG AAAATTGAAG AAAAGAATAA GATGATTAAT TGAATTCTCT AAAAGAACAT 120  
 ATTTTAAGAG ACAGAACTTA GACATAACCA AGTAGTTGTA TACCTGATTG TAACAATCAT 180  
 CTTTATAAAA AGCAAAATTA TGCATAAATG TAAACACCC CTAACAAAG GGAACAAATG 240  
 ANTTTTGGT TATATTGTTT TCTTGCTCA AAGTATCAAT TTATTATTAT AATAGAAAT 300  
 TATAAGTTGC TAGAAAGTCT ATATTTTAA CGCACGGAAT AAAANTATGT TTTCTATTAA 360  
 A 361

SEQ ID NO:2850

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03391

## SEQUENCE DESCRIPTION:

GATCTGTCTC CAAGACCTTG GCCTCTCCTT GGAGGACCTT TAGGTCAAAN TCCCTAGTCT 60  
 CCACCTGANA CCTGGGAGA NAAGTTTGAA GCACAACCTC CTTAAGGTCT CCAAACCAGA 120  
 CGGTGACGCC TCGGGGACCA TCTGGGGCAC CTGCTTCCAC CCGTCTCTCT GCCCACTCGG 180  
 GTCTGCAGAC CTGGGTTCCT ACTGAGGCC TTTGCAGGAT GGAACACGG GGCTNGNAGG 240  
 AGCTTTTGTG TGCCTGGTAG AAATATTTC TGTCCAGTC ACATTGGCCA TCACTCTTGT 300  
 ACTGNCTGCC ACCGNGGAGG ANNCTGGTGA CAGGNCAAAG GCAGTGAAG GAAAN 355

SEQ ID NO:2851

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03392

## SEQUENCE DESCRIPTION:

GATCTAGTTC TACGTATTAC ACAGGTGTAA TATCTGTGAG TGTAATAAAC TGGAACGTGA 60  
 CACTGATTAA CATGNCAGTT TCTCTTTTGT TGTCTTATC TGTACTGTAT TATAGTATGT 120  
 GGGTATAAAT ATCTACAAGT ATACACACAT ATGTNCTNGT ATTCCACTAT TGTAACCTGG 180  
 AAGAAAGACT ATGNATNCCC TTTNNAAATT CCGTACTGGT ATNGTGTTA TTTAAAAAGC 240  
 AAAATNCGGC TCTATTAGT TGTATAATAT TAGAGGGTAC TNNCTTGNN CACAATTCCA 300  
 AGTGGCCTTA GAGCATTGTT TAGCTNNCCG AAGTATATAT AANN 344

SEQ ID NO:2852

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03393

## SEQUENCE DESCRIPTION:

GATCTATGAG CCTGTNTNGG ACAGCCAGAT GGTCAATCATA GTCACGGTGG TGTGGGTNTT 60  
 GCTGTCCCTG TTCGTNACAT CTGTCCTGCT CTGCTTCATC TTCGGCCAGC ACTTGGCCCA 120  
 CNGCGGATGG GCACCTACGG GGTGGGAGCG GCTTGGAGGA GGCTGCCCCA GGCCTTCCGG 180  
 CCATAGCAAC CATGANTGGC ATGGCCACCA CCACGGTGGT CACTGGAACT NAGTGTGACT 240  
 CCTCAGGGTT GAGGTCCAGC CCTGGCTGAA GGACTTGTA CAGGCAGCAG AGACTTGGGA 300  
 CATTGCCTTT NNTAGCCCGA NTACAAACAC CTGGACTTAA A 341

SEQ ID NO:2853

SEQUENCE LENGTH:567

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03394

## SEQUENCE DESCRIPTION:

GATCTCAAGA CCAAAGACAG ATGTCAGTGG GCTGCTCTGG CCCTGGTGTG CACGGCTGTG 60  
 GCAGCTGTTG ATGCCAGTNT CCTCTAACTC ATGCTGTCCT TGTGATTAAA CACCTCTATC 120  
 TCCCTTGGA ATAAGCACAT ACAGGCTTAA GCTCTAAGAT AGATAGGTGT TTGTCCTTTT 180  
 ACCATCGAGC TACTTCCCAT AATAACCACT TTGCATCCAA CACTCTTCAC CCACCTCCCA 240  
 TACGCAAGGG GATGTGGATA CTTGGCCCAA AGTAACTGGT GGTAGGAATC TTAGAAACAN 300

GACCACTTAT ACTGTCTGTN TGAGGCAGAA GATAACAGCA GCATCTNGGN CCAGTCTCTG 360  
 CCTTAAANGG AAATCTTTAT TAATCACGNA TGGTTCACAG ATAAATTCTT TTTTAAAAA 420  
 AANCCCANNC TCCTNGGGAT GCACANCCTG TCAAGNGTCT TTTTACACAC AANTTTCAGG 480  
 TTTNNCATCA CGGGGCTTTG ANTCNAGGA AATNAAAGGN GGGACAAATT TNGTTNGTTT 540  
 ACNCTATGGT NCTTTNNTAA NAAACNN 567

SEQ ID NO:2854

SEQUENCE LENGTH:349

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03395

SEQUENCE DESCRIPTION:

GATCTTTACT TTTTACTTT TTATTCATCT TTGTGTTTT ATTTATCTAA AATGGGTATT 60  
 GATTTTAAGG ACGGTTTTGA AAAAGAAAAG TGTGCGGAAT GAAGCAAGTG ATTGATTGGA 120  
 AAACATACTG AATGGAAGAA ATATTTAGAT TAAAAATGAG GTAGGTTGAA GTTCTNCTC 180  
 TGAATNATA GATAAATGGT GAAGATAAGG CTTATTGTGA GGNTTCAGTG AGGTAATATA 240  
 TGCAAGTAC TTACAATGTT CTGGCACATA GTAATTNATT NNGANAATCG AGCACCCCTA 300  
 ATTACCTAGA ATGCAGGGTT GTTAGTTTT NGTTGACTT TTGTTTTNN 349

SEQ ID NO:2855

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03396

SEQUENCE DESCRIPTION:

GATCCGCTGT ATTGTGGAGT ATCAGAACAA GGGCCGCGGG AACGAGNGCG TGCAGTACCA 60  
 GCATGTGTTA CATAGAAATC TCATTTATTT GGCTACCATT GCAGATGCCA GTCCAACCAG 120  
 CACTTCAAAA GCAATGGAAT AATCTTTCAA AAGCAATAGA ATAATCTTCC ATTTGGCTGT 180  
 CGTGAGGAGT AATTGAATGT AATCCATCTC TTACAAAATG GAGACAGGGT CTTTACCAAC 240  
 TCAACTGGTT AAAACATGAN TGAAACCTCT GTGGCTCTTT CAAAACGTGG AAAATGTGAA 300  
 GAANGCTACT TAACCTNGGC TGTATTCTCA TGGN 334

SEQ ID NO:2856

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03397

SEQUENCE DESCRIPTION:

GATCGGCCTG CTGCTCCGCA ACTTCGACCG CTACGGCGTG GAGTGCTGAN GGA CTCTGCC 60  
 TCCAACGTCA CCACCATCCA CACCCGGGAC ACCCAGTGAT GGGGGAGGAT GGCACAGTGG 120  
 TCAAGAGNAC AGACTCTAGA GACTGTCAGA GCTGACCCCA GCTAAGGCAT GGCACCGCTT 180  
 CTNTCCTTTC TAGGACCTCG GGGTCCCTCT GGGCCAGTT TCCCTATCTG TAAATTGGGG 240  
 ACAGTAAATG TATGGGGTCG CAGGGTGTG AGTGACAGGA GGCTGCTTAG CCACATGGGA 300  
 GGTGCTCAGT AAAGGAGAGC AATCTTACA AA 332

SEQ ID NO:2857

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03398

SEQUENCE DESCRIPTION:

GATCCTGGGT GTNTNTGTAA GGGTNTTGCC AAAGGAGGTT AACATTGGAC TCANTGGGCT 60  
 GGGGAAAGGC AGACCCACCC TTAATCTGAG TGGACACCAT CTAATCAGCT GCCAGCGAAA 120  
 ATAAAGCAGG CAGAAAANTG AAAAAANTAG ACTGGCCTAG CCTCCCAGCC TACATCTTTN 180  
 TCCCATGCTG GATGCTTCCT GCCCTTGAAA ATTGGACTCC AGGTTCTTNA GTTTTGGGAC 240  
 TTGGACTGGC TCTCCTTCTT CCTCAGCCTG CAGACATCCT ATTGTGGGAC CTTGTGTTTC 300  
 TGTAAGTTCA TACTTAATAA ACTCTCCATA N 331

SEQ ID NO:2858

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03399

SEQUENCE DESCRIPTION:

GATCGAGTCT ATACGCTGAA GAAANNTGAC CCGATGGGAC AACAGACCTG CTCAGCCCAT 60  
 CCTGCTCGGT TCTCCCCAGA TGACAAATAC TCTCGACACC GAATCACCAT CAAGAAACGC 120  
 TTCAAGGTGC TCATGACCCA GCAACCGNGC CCTGTCCTNT GAGGGTCCCT TAAACTGATG 180  
 TCTTTTCTGC CACCTGTTAC CCCTCGGAGA CTTCGTAACC AAACNTTCG GACTGTGAGC 240  
 CCTNATGCC TTTTGCCAGC CATACTTCTT TGAGCATCCA GNNTNTNGTG GCGATTGAT 300  
 TATGCTTGTT GTGAGGNAAT CATGGGTNGG CNTCNCCNT TAANGGGGTG N 351

SEQ ID NO:2859

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03400

SEQUENCE DESCRIPTION:

GATCCTGGGG GCCTGGGTTG GGGGCTAGGG AGACGCCATG TGATGGACAC TCCAGGGACA 60  
 CACAGCCTAG CACAGCAGCT TATAATGGGC TCTCGGGGC CATTTGCAAT AACAGCTGCA 120  
 ATTCCTGGA TAGACGAGTT GATTTCTTCC CTCTGCCCCT CCCCAGCCA TGCCAGCTGG 180  
 CCTTTGTAAG TGCAGGAAAC CGAGTAGAAA ATGTGACCCT CCAATGGAG AAGCTGCAGG 240  
 CTTTGCCATT GTGAACCATG GTGAAGTGCT TGGAACATAC TGTTCCTCA CTCTAAAGGN 300  
 GCTGAGACTG TGCTGTTGTT CTCGTTTTTN 330

SEQ ID NO:2860

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03401

SEQUENCE DESCRIPTION:



GATCTGGAAG GGACATGACT TCTGAAATAG CCGCTGCTGG GTTTTAAAAG CTGAGGTCTC 60  
TCAAAGTGTG GAGGAGACGT TGCCGTCAGN GGGAGCCAAG TGCCGGGAAG ATGTCTATTT 120  
TTTTCTTGT GTATTGAAAA TCATGATGTT TGTATGACT GCTGATGCGA TTGTNTTGT 180  
5 AAATNTNATT GTGGCATATA CAGTATTGTC ATACAGTTGA AGAGAAACAA TGTTTCCTAA 240  
TGTAAGTNCT CTGAAAATGT TGACACTGTA TATATATATA TNAGGATAGT TTGTNTTTCN 300  
NTGTTTGGGG TTTNNNTTN TTTGNGNTGN 330

SEQ ID NO:2861  
10 SEQUENCE LENGTH:396  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03402

15 SEQUENCE DESCRIPTION:  
GATCTTAAAC CCAAAGTACG AGAAATGTTT CTGTTGAATG TAATGCTACA TGAATGCTTG 60  
ATTTATCAAG CGCCAAAAG GCATTGTATA GTAGGAAATG TAAGTGGGGT GGCTTATGGC 120  
TTCTTATCC TCTGATTCTA GCACTTTCAA GTGAGCTGTT GCGTACTGTA TCATATTGTA 180  
20 GCTATTAGGG AAGAGAAGAA TGTGCTTAA GAAAGAACAT CACCATTGAT TTTAAATACA 240  
AGTAGCAGGG TATTGCCTTT GATTCAACTG TTTAAGTCC TCATTTTCT CAAACTAAGT 300  
GCTTGCTGTT CCCAAATATG GCAAGGNATA GCTTTTACAC TTTTCCCTG CCAACANNTC 360  
NTNGATTGGC TTGCAGANA TNNAGGTTTG ANTTGN 396

25 SEQ ID NO:2862  
SEQUENCE LENGTH:330  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03403

30 SEQUENCE DESCRIPTION:  
GATCCAAAGT GACCCACCA GGGGACAGCC AGAGGAAGGG GACCATGGGG TATCCNNAGT 60  
GTCCTGGTCT ATCACCACAG CTCTTTGTC CCCAGTACC CCCAGCCCAG CCAGCCAATA 120  
AGAGGACACA AATGAGGACA CGTGGCTTTT ATACAAAGTA TCTATATGAG ATTCTTCTAT 180  
35 ATTGTACAGA GTGGGGCAAA ACACGCCCCC ATCTGCTGCC TTTTCTATTG CCCTGCAACG 240  
TCCCATCTAT ACGAGGTGTT GGAGAAGGTG AAGAACCCTC CCATTACGC CCGNCTACCA 300  
ACAACAAACG TGCTTTTTTC CTNTTTGAAA 330

40 SEQ ID NO:2863  
SEQUENCE LENGTH:329  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03404

45 SEQUENCE DESCRIPTION:  
GATCTTATTT TCTGAGAAAT TGATAGCAAA TATGCCAGAA AGTGGACCTA GTTATGAATT 60  
CCATCTAACC AGACAAGAAA TAGTATCATT ATTCAACGCA TTTGGAAGAA TTTCTACAAG 120  
TGTGAAAGAA TTAGAAAAC TACAGGAAC TTACAGAAAT ATTCATTAAA GAAAACAAGC 180  
50 TGATATGTGC CTGTTTCTGG ACAATGGAGG CGAAAGAGTG GAATTTTATT CAAAGGCATA 240  
ATAGCAATGN CAGTCTTAAG CCAAACATTT TATATAAAGT TGCTTTTGTA AAGGAGAATT 300

ATATTGTTTT AAGTAAACNC ATTTTAA

329

SEQ ID NO:2864

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03405

SEQUENCE DESCRIPTION:

GATCACTTCA GCTGCCTGCT GTGGACAAAG AACATCAAAT TACAGCATCA CGAGTGCTAT 60  
 TTTTGCCTGT GGTGGTCTCC CTGTCCAAGC GGGNCCGCTT TGCAGAGACC AGAGGCATAT 120  
 CGCGGCTTGA GCTGAAAATG CATTNTTGC AGCTTAGGTT GAATTATTTT NCGTTTGCTC 180  
 TTTCTTCTAC ACGCGCCTGA TGGATAGTGA ACCTATTCAT CAAAAAAGTG CACTGCTCTN 240  
 CTGTCTATTG TACCGACTTA ACCTCTTCCA CCCAAGTCCG CATCTGTGTG TATCATCAAT 300  
 AAAGTTGGTN GTGCCTTGGN TTGGGCAAA 329

SEQ ID NO:2865

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03406

SEQUENCE DESCRIPTION:

GATCGGCGTG ACCACCCCTT GCCGGAGGTG GCCCATGTNA AGCACCTNTT TGCCAGCCAG 60  
 AAGGCACTGA AGGAGAAGGA GAAGGCCTCC TGGAGCAGCC TCTCCATGGA TGAGAAAGTC 120  
 GAGTTGTATC GCATTAAGTT CAAGGAGAGC TTTGCTGAGA TGAACAGGGG CTCGAACGAT 180  
 NTGGAAGACG GTTNTNGGCG GGTNCCATGT TCTTTAATCG GTTNAACGT GTCGTTNCC 240  
 CCTNTGAAA AAGNCTTNT GTTTACCGGC CCCCTTCCG AAAAGTTTTN ACAAANGGT 300  
 GGGGTTGCCC AAGNAGGCCC AANAGGNN 328

SEQ ID NO:2866

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03407

SEQUENCE DESCRIPTION:

GATCTACAGA GTTAGAAATT CGAAAACTAT TCCAGGACTA ATTCTTAATC GGCATTATTT 60  
 ATACAAGAGG TCAAGTAACA TTTACTAGCG CAATACTGCA CTTGTAATG AATTATAAAC 120  
 GCTCTTCTGG AATATATTTA AATAACCATT AAAGAACTGC TTATTCATNC TGGACACTGC 180  
 ATGTNGATGT TGAATCAACT GATGCCAGCA GAAAGCTATT TTGATTGTG AACATACTGC 240  
 CTTATTTAAA GGGTCCTGAT TGCTTGTATT TTANGNCATT CATTAAAAAG AAACCAGGAA 300  
 ACACCTTTGA ANTAACAGCA TANGGNN 327

SEQ ID NO:2867

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03408

SEQUENCE DESCRIPTION:

5 GATCACCCCTC CTCCCAAAAA GCAAGAGCTT GTTTATGGCT GAGGAATCGG CGGATTGTCT 60  
 GAATGACACA TATACAGAGC CCCACGGAT TTCTNCACAC TCTGGGTCTG TGCTGGTGGA 120  
 ACATTGCCAA TNAGTTCTTA ATGAGGCACC TGTGTGTAAA TACATGCTTG GTCTTCTCTG 180  
 CAGAGAACTG AGGCTAAACT CTGTCCCTAC TTCTGGTTTT GCCCTGTNAT GTCGTAACGA 240  
 GGTGGGCCTT TTGAGGCCAT TTTAGTTTGA GTTCGAGCCA ACCACCTCTG GTTGGTAGA 300  
 TGATTGAATA AAAAGGTTCT GAAGAAA 327

SEQ ID NO:2868

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03409

SEQUENCE DESCRIPTION:

20 GATCCAATCA CCTCCCACCA GGCTCCACCT CGAATACTGG GGATTACCAT TCAGCATGAG 60  
 ATTTNGGCAG GAACACAGAC CCAAACCATA CCACACACAT TATCATTGTN AAACCTTTGTA 120  
 AAGTATTTAA GGTACATGGA ACACACGGGN AGTCTGGTAG CTCAGCCCAT TTNTTTATTG 180  
 CATCTGTNAT TCACCATGTA ATTCAGGTAC CACGTATTCC AGGGAGCCTT TNTTGGCCCT 240  
 CAGTTTGCAG TATACACACT TGCCANGTAC TCTTGGTAGC ATCCTGTTTG GTATCATNGC 300  
 ACTGGGTCAC ATTGCCTTAC CTAAAN 326

SEQ ID NO:2869

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03410

SEQUENCE DESCRIPTION:

35 GATCTATGGA ACAGAGGAGG AGCGATGCAG TTGGGAGAGG AAGCTAGAAG GGTATGGTT 60  
 GGAGTTCTGT ACAGTGTIGA GTTCCGACA GGGAAAGAGG ATTCTCCAA TGCGCCTAGA 120  
 GAGAAAGCCT GAGCAGGAGA TGATGCAGCA GAGGGGAAGG GCCCTGTGGT GCCGCCGCC 180  
 TTCTTTCAGC CTCCGAAGGT GATGGAAATG GAGAGTGGAG GACCAGGCCT CCAGCTGTNT 240  
 GGCCTNGCCN TTCAGCCTT AACACTAAGC CCACCTCCCC TTNTCTCCTT CCCAGCATTG 300  
 AGCCCTTGGT TGCCTGGGCC CAGGN 325

SEQ ID NO:2870

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03411

SEQUENCE DESCRIPTION:

45 GATCTTCAGA AACCTTGCTA GGAGAAGTTA ATGAAAATAG AGTATCAATA GCATTGAAAA 60  
 AAACCTCTGA AATCCTTCAC GATATTGACT GTCTTCTATC AAACCTCTAA AAGTGAAAA 120  
 TGGAATTATT ACAACATATT ATTAAGTTT AAGGATGTTG TTTCAAGTGA CTGGTATAAA 180  
 ATTACTAGTA AGCCAAGATA TTGTACGTAT TACCCCGCA CAATGATTGT GAAAGANCTG 240

ACATTTAACT TTGAAGGTAT TTTAACTTG TACATTTTAA AAATATGTAT TTATATCTNA 300  
 NTANTAAATN TTTCGAAGTT TAAAA 325

SEQ ID NO:2871

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03412

SEQUENCE DESCRIPTION:

GATCCAAGCG GAGATTGACG CTGCAGCGGA NACTCATCGA CTTCTTCCGG TTCAATGCCA 60  
 AGNATGCGGT GGAGCTGGAG GGGCAGCAGC CCATCAGCGT GCGCCCGAGC ACCAACAGCA 120  
 CGGTGTACCG GGGTCTGGAG GGGTTCGTGG CGGCCATCTC GCGCCNTTAA TTTACTGCAA 180  
 TCGGCGGCAA CCTGGCGGGG GCACCGGCCC TGATGCTTCG AGAGGGAGTT GTGACTCTGC 240  
 CTCTTTGCCA GATGACAAAA CTGAGACACA CAGCCGTGAC TTACTTGGCA AGACTGAGTG 300  
 ACTAGTAAAT AAATGATGGA GCAGN 325

SEQ ID NO:2872

SEQUENCE LENGTH:323

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03413

SEQUENCE DESCRIPTION:

GATCCTCCTT CTAGCTCATC TGTAATACT AGTAGTAGTC AACCAAAGCC TTTCAGACGA 60  
 GTAAGACTTC AGACAACATT GAGACAAGGT GTCCGTGGTC GTCAGTTTAA CAGACAGAGA 120  
 GGTGTGAGCC ATGCAATGGG AGGGAGAGGA GGAATAAACA GAGGAAATAT TAATTAANTG 180  
 GTCTGTAAAC AATAACAACT GTGAATAAGA TTATCAAATC TTTTTAGTG TAATGATTGT 240  
 CAAGTTTAAA ANCATTTTTN TATATAACCT GGTATACTCA TGTCAATATN CTTTATTAAT 300  
 AAAANGNTT TCAGTGTCAT AAA 323

SEQ ID NO:2873

SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03414

SEQUENCE DESCRIPTION:

GATCTGCCCC TCTCAGCCTC CCAAAGTGCT GGGATTACAG GTATGAGCCA CAACGCCCAN 60  
 CCATCATTTA TCTTTTTCAC TCATTTTTC ATGAGTATGC AGAGGAGTTT TCAAGAGGCT 120  
 ATCTGGTGTG ATATTGTAAT AGGCTGAATG CAAAAGCAGA TACAAGATTC CAGCTTTCGT 180  
 CTGTATCAG ACATTGAAGA GATTTGGAGA AATGTAAAGC AGCAGTACTC TTCTCACTAA 240  
 TTTTGTGTG GGTAGTTAG AAAAATGGTT ATTTNAGTG GGTTTTAATA TGTGAAAAAA 300  
 ATAAAAATTAG CTATTTGCCA AA 322

SEQ ID NO:2874

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03415

SEQUENCE DESCRIPTION:

5 GATCACTNT GCGGTGTTCC TNCCAAAACN GCATAGCCCC AATCTAATAT CATCCCGAGG 60  
 AAATACCAGA CACACGCAAG GGAAGGACA TTCTACAAAG GAACGGACTC ATACTCTTCG 120  
 AAAAGTGTCA AGGTCATCTA CGACAAAAGA CTGAAAGGAC CCCAGTCGAA AAAAGNCAAG 180  
 ATGACAAANT GCAACGTTTC ATCCTAGACT GGATTCTGGA CCAAAAAAT CCCCTTCTTT 240  
 10 TGTCAGAAAG GAAATTTGTG GAACAACCTGG CAAATCTGG AGTTGGGTCT GCAGATTACA 300  
 CACTGGTATC GCAGCGAAA 319

SEQ ID NO:2875

SEQUENCE LENGTH:320

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03416

SEQUENCE DESCRIPTION:

20 GATCTCCCTT CGTGGAGACG ACACCGGGGT CCTCCTGCCC ACCCCAGGGG AGGCCCAGGA 60  
 TGCTGATTG AAGGATGTAA ATNTNATTCC AGCCACCGCC TGACCATCCG CCATTCCGAC 120  
 TGCTAAAAGC GAATGTAGTC AGGCCCTTT NATGCTGTGA GACCTCCTGG AACACTGGCA 180  
 TCTNTGAGCC TCCAGAAGGG GTTCTGGGCC TAGTTGTCCT CCCTCTGGAG CCCNGTCCTG 240  
 TGGTCTGCCT NAGTTTTNCC CTNCTAATAC ATATGGCTGT TTTCCACCTG GNTAATATAA 300  
 25 CCANGAGTTT GGGCCGNA 320

SEQ ID NO:2876

SEQUENCE LENGTH:308

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03417

SEQUENCE DESCRIPTION:

35 GATCTCTGCT GTGNTCCCA GAGTTACTGC TGCCAGACTG AACTGGAAGG GGAGGATGTA 60  
 GGAGCCTGCA CAGCTCACAC CTACTCCTGT GGCTCTGGAG TGGGCATCTN CCTGAGAGTA 120  
 CGGGAATGTN AGGTGCTATT TTAAGCTGGC AAAACCAAAG GCTGTTTTNA TTCTCCTCCT 180  
 TACCTTGATG ACTATGGGGA GACCGACCAG GGACTIONAC GGGGAAATCC TTTACATTTA 240  
 TGCAAAGAGC GATTCAAGAA GATTCAAGAA CTCTGGCACC AACACAGTGT CACAGNGGAA 300  
 40 NTTGGNCN 308

SEQ ID NO:2877

SEQUENCE LENGTH:308

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03418

SEQUENCE DESCRIPTION:

50 GATCTTGACC ATGACAGTTT TNCACCTTTA ATGAAACGGG GAACCAAGAG GAACTTACTT 60  
 GTGTAACCTNA CAATTNCTGC AGAAATCCCC CTTCTCTTAA ATNCCCTTTA CTCCACTGAG 120  
 GAGCTAAATC AGAACTGCAC ACTCCNTCCC TGATGATAGA GGAAGTGGAA GTCCCTTTAG 180

55

GATGGTGATA CTGGGGGACC GGGTAGTGCT GGGGAGAGAT ATTCCTTAT GTTTATNCGG 240  
 AGAATTGGA GAAGTGATTG ACCTTTTCAA GNCATTGGGA AACAAATAGA NCACANTATA 300  
 NTTNNCN 308

5

SEQ ID NO:2878  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

10

CLONE:HUMGS03419

SEQUENCE DESCRIPTION:

GATCTAGAAG ACGATTAAGG GAAGGTCGTT CTCAGTGAAA ATCCAAAAAC CAGAAAAAAA 60  
 TGTTTATACA ACCCTAAGTC AATAACCTGA CCTTAGAAAA TTGTGAGAGC CAAGTTGACT 120  
 TCAGGAACCTG AAACATCAGC ACAAAGAAGC AATCATCAAA TAATTCTGAN CACAAATTTA 180  
 ATATTNNNT TNCTGAATGA GAAACATGAG GGNAATTGTG GAGTTAGCCT CCTGTGGTAA 240  
 AGGAATTGAN GAAAAATNTAA CACCTTACAC CCTTTCCAT CTTGACATTA AAAGTNCTGG 300  
 CTAAC TN 307

20

SEQ ID NO:2879  
 SEQUENCE LENGTH:307  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS03420

SEQUENCE DESCRIPTION:

GATCTTGAGG GCAGACAGCA GAATTCCTCT TATAAAGAAA ACTNTTTNGG AAAATACGTT 60  
 GAGGGAGAGA NGACCTTGGG CCAAGATGCT AAATGGGAAT GCAAAGCTTG AGCTGCTCTN 120  
 CAAGAGAAAA TAAGCAGGNC AGAGGATTTN CTCTGGACAG AGATGGAAGA GCCGGGAACA 180  
 GAGAAGTNTG GGGGAAGAGAT AGGAACCAGC AGGATGGCAG GGGNNNNGG CTCAAGGGTN 240  
 AGGAGGCCAG TGGGACCCCA CAGAGTTNGG GGAGATAAAG GAACATTGGG TTGCTTTGG 300  
 TGGCACN 307

35

SEQ ID NO:2880  
 SEQUENCE LENGTH:305  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03421

40

SEQUENCE DESCRIPTION:

GATCTGCCGT GTCCTTATAA AGTGGATGAA AAATGTTTTG TACCCATCTG GAAAACCAAC 60  
 AACTTGAAAT CTCAGGTATT CCAGGTCAC TACATGAATT TGAAGATATA TCTATCTGTA 120  
 TGGATATATA TCTATATGTA TATAGATATA TAANTACAGA GAGATATCTG GCTTGGTTTT 180  
 AATTATGTNC TTAATTTGT GTGCCAATAA TTGCATATAG ATTTTNTTNC TTAATATTT 240  
 GACTGTGGAA CATGCCATTT TAAATATGTN GTAAGGCCTG TNNTAATAAA ACGTTTAGTA 300  
 TGA 305

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SEQ ID NO:2881  
 SEQUENCE LENGTH:305

50

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03422

SEQUENCE DESCRIPTION:

GATCCACTGA TGGCTCCAGA CCCCAACTTT AGCCATTGCA CGTGTGAAC TCCAGGTTGA 60  
GCCTTTGCTG GAGCCGCTG CAAGGNGCAT GTTGACCAA TCCCAGTGG AGGGGAGGGT 120  
GGTGTTCCT TTCTGGGACT TCCACAAGTT GAGAACAGAC CATGCTGCC TGGGCAGTTC 180  
TTGAAGGCTG TGAGAGTGGG CCTGACAAAG TTTATTCCTT TTTTTTTTC CATTNCCTT 240  
TATNATNATA ATTGTTTGA ATNGNCAANT AAAATNATG TATATTTATG ANGTNCANCA 300  
NGAAA 305

SEQ ID NO:2882

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03423

SEQUENCE DESCRIPTION:

GATCAGGAAA GTCATACTGT TCACTTTCAA GNTGGCTGTC CCCCCGCG AGCCCCCCA 60  
CCCCCATATG TACAGATGAT ANTAGGTGT GGAATGTCGT CAGTGGCAA CATTTCACAG 120  
ATTTTATTT TGTTCCTGTC TNNANCNTT TGNCACTGT GCTAATAGTT ATATTCAGTA 180  
CATGAAAAGN TACTACTGTG TTGAAAGCTT TTTAGGAAAT TTTGNCAGTA TTTTGTACA 240  
AAACATTTT TTGAAAAAT ACTGGTTANT TTATNCTATT TTAATTNGCC AATGTCAATA 300  
AAN 303

SEQ ID NO:2883

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03424

SEQUENCE DESCRIPTION:

GATCACCGGA CACAATCCTG CAGAAGGACA CACGACTCTA TTTCTACAG TCGGAACTT 60  
GTCATTCTAG ATGTNCTGTT GCCAGTATCA AAACCGGCTT CCAGGCTGTC ACGGCAAGC 120  
GAGCACAGCT CCGTGCCAAA GCTAACTAAT TTGCTAATCA CTGATTTNC AAAGCTTGTT 180  
GTGGAGATGT GGCTGGACAG GTTTGCCATC AGAGTGGATA TACCGTTGTA TAAAAACAA 240  
GATAAAAAAG CTGCCAAGAT TTTTGGCGNG TGGTTGGTCT GAAGTCCTG CAAGACGCTG 300  
NTGCTCAAGC TGTTGACATA CTCATTGGCC TACTTTTAAC ACCTGTCCAG AGGAAACGTG 360  
NTATGGGGGT AAGTN 375

SEQ ID NO:2884

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03426

SEQUENCE DESCRIPTION:

GATCAGATAG GAGCACAAGC AGGGGACGGA AAGAGAGAGN CACTCANGCG GCAGCATTCC 60

CTNCCAGCCA CTGAGCTGNC GTGCCAGCAC CATTCTGGT CACGCAAAAC AGAACCCATT 120  
 TAGCAGCAGG GAGACGAGAA CACCACACAA GACATTTTTC TACAGTATTT CAGGTGCCTA 180  
 CCACACAGGA AACCTTGAAG AAAATCAGTT NCTAGNNNN GCTGTTACCT CTTGTTTACA 240  
 GTTTATATAT ATATGATAGA TATGNGTAT ATATATAAAA GGTACTGTTA ACTACTGTAA 300  
 A 301

SEQ ID NO:2885

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03427

SEQUENCE DESCRIPTION:

GATCGGGGGA GGGTAAATAA TGCAAAATTT GCACAGTGGA AGAAGGGGTC TCACAAAAAG 60  
 CAATCCATCC TGTAATATAG GTANNNGNGT TGGGGGAAGC AGCTTCCATT CTGGATGTTT 120  
 GGAACCCCTT AGCTTTGTTT TGGAATGGCC CACCATTCTC ACTGGAAAAC AGTGGTCTGC 180  
 TGTGAAAGGC CAGCTCTCGG CAGCCCCTGT GGTTCAGCG CTGCCGCTCT GTGTCATTCA 240  
 GGTGTGCAC ATTGTTTTTC TTCTGACTTC CAGAAATAAA AGTGTTCCTA TGGGAAA 297

SEQ ID NO:2886

SEQUENCE LENGTH:296

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03428

SEQUENCE DESCRIPTION:

GATCTGGGTG CCTTGGGAGA NCCAGTCCTT CCTTTNACC CACCCAGGA AGATGGAGTN 60  
 CTCTTNTCTA GGCCCATGTC CTGCCAGCAA CCGGGATGCG TGGGCAACTG GACTCTGCAC 120  
 GGGGGTCTAC AGGTTGAGGG AGGTTGGTCA CAATNAGAAC CTCGGGGTTT GAGGTGBCCA 180  
 TGGGCAGACA GCCNNAAGGG AGGGAGGGTG TGGGTGTNCG TGTGTGCATG TCCTGGTNTG 240  
 TAAGGGGAAA AGGGTCTTTC CTGGTTTTAT TTAAATAAAG TAGTTTATGT AACAAA 296

SEQ ID NO:2887

SEQUENCE LENGTH:296

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03429

SEQUENCE DESCRIPTION:

GATCTGTGCN GTGGTCCTNA GGCAGTTGTN TCCACACAAG TACTACTTCC TCGTGGGCTA 60  
 CAGTNAACT TTGCTGTCTT ACTTTAACA ATGTCCTGTG CGACTCCACC TCCTAACTGT 120  
 GCCCTCAAAG GTTGTGTATA AGTACCTCTA GAACAATCCC CTTTTNCCA TCAAGCTGTA 180  
 GCCTGCAGAG AATGGAACG TGGGAAAGGA ATGGTATGTG GGGGAAATGC ATCCCCTCAG 240  
 AGGNCCTGAG CATAGTCTCT CATCTGCTAT TGANTAAGA CCTTCTATCT TGTAAG 296

SEQ ID NO:2888

SEQUENCE LENGTH:356

SEQUENCE TYPE:nucleic acid



TOPOLOGY:linear

CLONE:HUMGS03430

SEQUENCE DESCRIPTION:

5 GATCTACTCT GTATGGGTAC CAAAATCACC TTCTCTCTTC AAGTCAAAGT TGAATTTAGA 60  
 ACTTTGAATA CAGGTCAAAA AATGTAGAAA ATATCATTTT ATATCCCTA ATCTATATAG 120  
 CTGAAAAAGG GTTGTATTTT CTTAGCTGAA TATGAATACC TCTTAAACAT AAATTAGTTC 180  
 CTCTCCAGTG AAGTATCTTA TTTTACCAAT CCATTTCAGG AAAGAGGTTT TGCTGCCGTA 240  
 10 AAGGCAGAAA TTTTATTTT ATCCCTTTTA TTTGAATGAG AGATTGAAA ATCGAATTAT 300  
 GTAAATATTT CAATGCATCT GCTATTATTT TGTGGAGTTT ATTAAACTAC TTAAA 356

SEQ ID NO:2889

SEQUENCE LENGTH:293

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03431

SEQUENCE DESCRIPTION:

20 GATCCCAAA CAAATCTTAG AATCANTTCA TTTAAAATAC TGAGCGGTAT TGANTACTTC 60  
 GAAGCAGAAC AGGCAATGTG CAGCCCTCAT TTATGAGAAA ACCCTCAGGA AACTCCCAGG 120  
 GTGATGCTTG GNGAAGCTGT GAGTTGAGCT GAAGCTGGAG AACTTCCTCC AGAGCAAAGG 180  
 GCTTAAGAAA GAAAGANGAA CTCTAAGCTG GGTCTGCTAA CATCACTCCA GTTTAGATGG 240  
 25 NTCTGTTTT TCCTTAACAN GTTGAGGCGT GGTAGAGCA GGANTTGGTT TTN 293

SEQ ID NO:2890

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS03432

SEQUENCE DESCRIPTION:

GATCTGAAAT AACATTAATT TGATTGTAAC CCTATTGGGG TTAGTTCCCA CCCTTTGTTC 60  
 CATCTTGAGC AGAGATGNGC TGCATTTCTT AACGTTTGGT CTCTATACAT TATACCATCT 120  
 35 GCTGAAGTTT AGCTTTGTGT GTGTGTATAT GTACCCATGT GTGCACTTA AATATCAGTA 180  
 CAAACTGATA AACAATGTTT CTGGTTAATG TTGCAAAAAT GGAACACTGT ATTNACATA 240  
 ATTGATTTTC TACTCCTGCC CTGTGAATTA AGGCAGAGTT TTAGTGTAN 289

SEQ ID NO:2891

40 SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03433

45 SEQUENCE DESCRIPTION:

GATCTTCCA CACCAGCCTC CCAAAATACT GGGATTACAG GCTTGAGCCT CCATGCCTGG 60  
 CCCAGGTAAC ATGTTTATTG AGCTGTACAT GCATATGAGA AATAAGAAAC TTTTTCCTCC 120  
 TACTATCATC TCTTAAATNT NGTNTTCTTT TTCTTTTGCT TCCTCTTCTT CTNTNCTATT 180  
 TNTNATAAAT ATCATGCACA ACTATAACCT ATGGGAATNA TGTAGTAACA CAGATTATTG 240  
 50 ATCTTGTTAG AGTTGTATTA AAAATAACA AGCATTTCAA ATTTAA 286

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SEQ ID NO:2892

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03434

SEQUENCE DESCRIPTION:

GATCCAAGAC CAGGGTGGTT GGGGGCTGCC CCTGGCCGAG TCACTGAAGC GACTNATGTC 60  
 CCTGTNTCCA GGACGANCTC CTCTCCTACT TTGGGACGCC CACGTGGCAG ACCGTGACCA 120  
 TCTTTGTGGC GGNAGTGCTC ACCGCCTCAC TCACCATCTG GAAGAAGATG GGCTGAGGCC 180  
 CCCAGCTGCC TTGGACTGTG TTTTCTCTCG GGTAANNNGN GGCATTNTTC TGGGAGGGGT 240  
 GGGGATTGGG GGACATGGGC ATTTTCTTA CTTTGTAAAT TATTGN 286

SEQ ID NO:2893

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03435

SEQUENCE DESCRIPTION:

GATCTGCNGG GGCNTGTNCA GCTGCAGCAT TCCTGAAAGA TTTCGTAAC CATCCTAAGT 60  
 GGGCACATTT AGACATAGCA GCGTGATGA CCAACAAAGA TGAAGTCCC TATCTACGGA 120  
 AAGGCATGAC TGGGAGGCC ACAAGGNTC TCATTGAGTT CTTACTTCGT TTCAGTCAAG 180  
 ACAATGCTTA GTTCAGATAC TCAAAAATGT CTTCACTCTG TCTTAAATTG GACAGTTGAA 240  
 CTTAAAAGGT TTTTGAATAA ATGGATGAAA ATCTTTTAAAC GGAAA 285

SEQ ID NO:2894

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03436

SEQUENCE DESCRIPTION:

GATCAGCTCT TTCTATTTTT ACTCGTAAAA ATTATGGAAA TAAATAATTT TGCTAACAAC 60  
 TTTGAAATTT CAAACTTCTG GAAAAATGA AAATATTCAT TGTTATTAT GAATTTAAAT 120  
 TGTAAGGTAT GAATGTNATT TGTCTGTACA TCTTGATCT TTTCCAAAA ATGATTCTGT 180  
 ATCTTTTGA AAAAAAGCCGA GAGTTGAAGA TAGTATATTT CTGGTAGTAC TGAATATTTA 240  
 CTTACAGTTT CTATCAAAAA TATATATTTG TTTCTAAAA TAAA 284

SEQ ID NO:2895

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03437

SEQUENCE DESCRIPTION:

GATCTCCTTG TTAGTGGTGG TAGGGAGCTA GACAAGGATG GCAACTATTT CTGTATCTTA 60  
 CATACCTTTN ATTTNGAGGC CCGTCAATG TTTTATATAA TANNCATTTT TTGAAAAGGC 120

AACTCTTAAA ACTAAACAA ACTTAACAGT CTGTCAAGTT GGTGATATAA CCCCACAGAA 180  
 GACTTACTTC AAGTGACTTG AAAACTTAGT ATTTGTCTG TNCITTTGCTA ATGGGNATAN 240  
 ATCCTACAGA CCAAACANCC NCAGNTAANT CTTAANCTGC AAA 283

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SEQ ID NO:2896  
 SEQUENCE LENGTH:279  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear

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CLONE:HUMGS03438

SEQUENCE DESCRIPTION:

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GATCCCGGGA GACCTGGGGC TGCCGAAGAA GCTCTGCTCC AAATGGAGAG TGTAGCCTGA 60  
 GGGCTGGTGT TGCCTGCCTC CCCTGTNCTT GTNCCTTGTC CCAAAATAAA TCCTTTCAGA 120  
 ATGTAGCACT CACGNCCTAA TAAGGAGCGA ATCCTACATC CACCAAGGCG GGCCTCTGG 180  
 CCCTCCCTTC CTTAAGCCCA GTCCTGTGTC CTCTGAAAGA GGTTCAGTC ACTCACACCN 240  
 GCTTGCCTC ACCATCAATA AAAGTAATTT CACCNGAAA 279

20

SEQ ID NO:2897  
 SEQUENCE LENGTH:278  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03439

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SEQUENCE DESCRIPTION:

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GATCCCTCC CCAAGATAC TCTTTGTGGG GAAGAGGGGC TGGGGCATGG CAGNCTGGGT 60  
 GACCGACTAC CCCAGTCCA GGGAAAGTGG GGCCTNCCC CTAGGATGCT GCAGCAGAGT 120  
 GAGCAAGGGG GCCCGAATCG ACCATAAAGG GTGTAGGGGC CACNNNNCTC CCCCTGTNCT 180  
 GTTGGGGAGG GGTAGCCATG ATTTGTCCCA GCCTGGGGCT CCCTCTCTGG TTTCCTATTT 240  
 GCAGTTACTT GAATAAAAAA AATATCCTTT TCTGGAAA 278

35

SEQ ID NO:2898  
 SEQUENCE LENGTH:276  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03440

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SEQUENCE DESCRIPTION:

GATCTGCTTA CCAAGCATAT TAGGAAATAC CTCTTAGGAA GCATTAGCGG TCTCAGGCCA 60  
 ATTACTGTGG AGCAGCTTTC ATTCCTACCC ACTTGCAAAC CTGGCGCTG TTGTCTGAGA 120  
 TTGCTGCAGC CATTCTTGT ACCATGGTAC TTCTCAAAC TGTGAAAAC CTGCACITTT 180  
 CCTTGCATGA CAGGTTCTG TCTTGTCTGT CATGGGAGCC ATTCTGCCAA TTAAATGCG 240  
 ACTGTGGTAT AAACAGTAAA ATGATTAAAA AGTAAA 276

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SEQ ID NO:2899  
 SEQUENCE LENGTH:274  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03441

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EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCAGTGTT ATATTTTACT GGAGAAGCTA TTGAAGATGA TGATGATGAT TATAATGAAG 60  
AAGGTGAAGA AGCGGATGAG GTAATGTTTA CCAAATAAGC AAATAATTCT NTGTGGTTAA 120  
CACATTGAGA AGCAAATTGA ATNACTTATG TATTCCTTTG CTATAATCAT TCTGTGATTT 180  
GGGATAAAAA CATTTTGGAA AACATGATTT TAGAATTCTA CAGCCAAACA ATGTATGTAT 240  
AAGGTTTCAA TAAATAANTT GCAAAACTCA GAAA 274

SEQ ID NO:2900

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03442

SEQUENCE DESCRIPTION:

GATCCCCACC TGCCATCCTA TAGTGTGTG TTCCTGTGTG TTCCGGGGCT TCTGGGCAGC 60  
TGGGCCTGCC CGGGGAAGTC CTTGCAGGTG GGAGGCCATA CAGAGACCCA CTGTGTGCCA 120  
CTGAGCGTCC CACTGCTGCT GGGCAACTGG AGGACTGCAG GGGGCGCCAG GTGACTCTCT 180  
CCTTTTATAT CACAGCAGCT CCTGTGCTGA CCTTCAAGTT ACGTTTTGGA ACTGTAATAC 240  
TAAAGGAAGA AATAAACTAC TAATTTGTAT AAA 273

SEQ ID NO:2901

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03443

SEQUENCE DESCRIPTION:

GATCTGGTTA AGTTGTGTAG TAAAGCATTG GGAGGGTCAT TCTTGTGACA AAAGTGCCAC 60  
TAAACAGCC TNCGGAGAAT NNNTGACTTG CTTTCTCTAA TCTNAGGTTT ATCTGGGCTC 120  
TATCATATAG ACAGGCTTCT NATAGTTTGC AACTGTAAGC AGAAACCTAC ATATAGTTAA 180  
AATCCTGGTC TTTCTTGGTA AACAGNTTTT AAATGTCTGA TATAAACAT GCCACAGGCG 240  
AATTCGGGGA TTTNAGTTTC TCTGAATAGC ATATATNTGA TGCATCGGAT AGGTCATTAT 300  
GATTTTNNNC CATTTGCGCT TCATAATGNA AACCAGTTCA TTTTACCTAT CAGGTTATN 359

SEQ ID NO:2902

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03444

SEQUENCE DESCRIPTION:

GATCAGAGCA CAGTTGAAAT TCATGGAAGT GGCATTATTT AAGCAACCAG AATTCCACAC 60  
TG TAGGAAGG TTTTGAAAAT TGTTTCGTGA TAGATTTTAT CTTATCTTTT GGTGTTGTCT 120  
TGGTTTTTCT CATAGACTTT ATAAGTTTGA ACTGGACTTA TTTGATTATA ACCACAAATT 180  
GTGTGTGTGT GTGTGTGTGT ATATATAGAA GTCATTATGG CAGATGCACA AATTGTGCAG 240  
TGATGTAAAT ATACATACTT CACAGAAA 268

SEQ ID NO:2903

SEQUENCE LENGTH:264

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03445

SEQUENCE DESCRIPTION:

GATCGGTAGT GTTGTGTGTA GGCCATTCTT CTGGAGAGCC ACAAGCAGGA AGAGCAGCGC 60  
 TGTGTTGCAG AATGGAGTTC CATGGATTTC TACCAGACCA CTGAAGGAGT TCCTNGAAGC 120  
 CCTGCGGTAG CTAGCACTGA AGACTATTTT NCTATTGGTA TAACCNCCCC ACCTGAAGGG 180  
 GAAAGGGGAA ATCAANTTAA TTTTCTCGTT AGACATANGG AAATTTAAGG AAAAACAGNT 240  
 TTAGGANCAG TTA CTCAGC TAGN 264

SEQ ID NO:2904

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03446

SEQUENCE DESCRIPTION:

GATCCATAGT GAAATTGCCA GAGTTTTGCC TGCTGCTTTC CTCGTGGCCT CTCTTGGGT 60  
 AGTGAAATNA AGTGACATTT GGATTTTAAT TTGGGTGGGA GGGCTGGGAC AGTTTTNTT 120  
 CTAGAAATGT CTGTTGAGAT TTCCCCCTTT AGTTTCCAAC CTTCTCCCCA ACCCTTGGAG 180  
 CTAAATGCGT TGTAAATAT TGCCAAAATG AAAAGTGTTT TGTAATACTG CAATAAAGGC 240  
 TGCTTGTTTT TGTGGAAA 258

SEQ ID NO:2905

SEQUENCE LENGTH:264

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03447

SEQUENCE DESCRIPTION:

GATCGGACAT GAAAGNACCC TGNGAGTCGA TTGTCTTANC TCCAGCGGCC CTGTCATCCA 60  
 GCTCACTCAT CAATGGGGCC AGTCAGGCC AGGCACTGGG CTCCGGAGGA CTCACCACTG 120  
 CCCCCTGCTG CCATGTGGAC TGGTGCAAGT TGAGGACTTC TTGCTGGTCT AGTCACGCAT 180  
 GCAGTGTGG GGGATGCCCT GGTTTTACT GCTCTGAGAA TTGGTTGAGA TACTTTTACT 240  
 AATNAACTG TGTAGGTTGG GAAA 264

SEQ ID NO:2906

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03448

SEQUENCE DESCRIPTION:

GATCTGCTTT CAACACTTTT AGCTCTTCTA GAATTCAGA AAAATGGTAT CGGATGTACA 60  
 GCATGGACCC TTCNTGGTG GGCTTCTTTA CTGTAATGCT TTAAANATTC ATCTGTGCTG 120  
 TTNAGTGTCT CTGCAGTCCA TTCCTTCTGT TGAGTGTATC AGTAGTCCAT TCCTTTTCAT 180  
 GGCTGAGTAG TATTCATTG TATAATTATA CCACTATTTG TNCATTTACT AGATAATANN 240

CAGTTGGCTT GTTAAA

257

SEQ ID NO:2907

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03449

SEQUENCE DESCRIPTION:

GATCCATCCG CCTTGGCCTC CCAAAGTGCT GAGATGACAG GCATGAGCCA CTGCACCCGG 60  
 CCATATAATC AAATTTTAT TGATTTTAGA GCAAAGGACT TTTCAATGT AACTGCTTAG 120  
 AAATCGAGCA ATTTTCTATT GTATAGAGTG AAAGTCAAAC TTGTTTATTG TACAAGTCTT 180  
 TAAAGGATA GTTAGGAGTA AGTTGTATTT GCTGAATATA TAGACCTCAT TTGTAGCCAT 240  
 TAGTGATTCT GTATTN 256

SEQ ID NO:2908

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03450

SEQUENCE DESCRIPTION:

GATCTAATTA AAAAAAGGC AATATTTTA TATTAAAGTA CTATACTAGG AGAGAATGTT 60  
 TCANAACCTC CTGATGAATT TCTAAGTGAG CAACTTGATA TAAAATTGTA ATCTTCATT 120  
 TTGTCAGTGT ATCCAGTTAC AGAATGCTAC ACACTTACCT TTTTATTGGC TGAGAAATCT 180  
 GGTATTTC A TCTTAATCTC AAGATTGTTT TCAAGTGTTT TATAATTAAA TCATAATAGC 240  
 ATATTTTAAA ATCAAA 256

SEQ ID NO:2909

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03451

SEQUENCE DESCRIPTION:

GATCAAACCA GCTCTTNTNA CCCAAACCAN TGCCGCTGCA TTAAAGGGAG GCCCAGCTAC 60  
 TCCTTCCCAG CTGAGATGTG GGTACAGGTC AGATTNTCA GGGAGATGGC ACTAACACGA 120  
 CACAAGCTCA CTCCCAGAAC CGCAGCTGAT GTTTATAATA ATCGTATGTA CTGTGCAATT 180  
 TAGGAGGGGA AAAAAAGGCT GTACAAGCTT TAACTCTAAA NNAAATNTCT ATTTTTTNC 240  
 TCTTGCAAAAN TAAA 255

SEQ ID NO:2910

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03452

SEQUENCE DESCRIPTION:

GATCTGCCCT GTACAGCCAT GTAGGCTGTG CGCTGCATAA CTCCAGGGAC ATGAGTCACA 60

CAGACACAAT GTGAGTGTGC TCCCCCGTCA TGCAACATCT GGACACAAC AACAGAGCAT 120  
 GGTGAATACA TGCTGAATTG CATTGAGTAT GGCTGTGAAC TAGGCCTGGG GACAAGANTG 180  
 ANTTTACAT GGAAAGAATT TCCTGTAGCA GGAACAGAGG GGATAACAAC AGCAGTAAAT 240  
 AATAATAAGN CAAA 254

SEQ ID NO:2911

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03453

SEQUENCE DESCRIPTION:

GATCCCCAC TAGTNCCTC CCTCTNCCC TGTAATCCTG GTCTAATAAC CCCCCACACA 60  
 TACACCTCTG GTGACCTATT TGCACAGACC GTNGTCTTCC CTCCAGTNTT CTNAGGGATA 120  
 GGGGACATTC CATCCCAAGC TTCTNCCTTA CCCACACCTA TCCTTTTNA GGGCTTTGGG 180  
 GTGGGGCTGG GGCAAGCAGA GGGACTGGGT CTTCACTTCT NGGGCTAATA AAATTGTTT 240  
 TTTGTGGACT AAA 253

SEQ ID NO:2912

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03454

SEQUENCE DESCRIPTION:

GATCAAAACCG GTTCTNTCCT TTCTTGTTT GCCATGTTAC TATGCCTCAA GCCCAGTTT 60  
 CTTTNTCCGC AGCGATGGG CCAGTCTCAT TCCTCCCCAG GAGTGAACT NGCTTCANCT 120  
 GAAAAGTTG GGTGCATTGT CAGTAAAAAG GGCTTATTG TTTCATTNA CTTTCCTGCA 180  
 AAATTTCTT CAAAGCAACA AGTCCTAGGN GCACACAAAG CAACCCAAAG GCTTTTCCCT 240  
 GGAAAAGCTC TTN 253

SEQ ID NO:2913

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03455

SEQUENCE DESCRIPTION:

GATCCGGGGC ATGCAGAAGC TGAGCACACC CCAGAAGAAG TNAGGGTCCC CGACCCAGGA 60  
 GAACGGTGGC TCCCACAGGA CAATCGCTGC CCCCCAACCT CGTAGCAACA GCAATACCGG 120  
 GGGACCTGG CGGCCAGGCC TGGTGCCATG AGCAGGGCTC CTCGTGCCCC TGGCCAGGG 180  
 GTCTCTTCCC CTGCCCCNTC AGTTTTNCAC TTTTGGGGTT TTTTATTGNT ATTAACTGA 240  
 TGGGNCTTN TAA 254

SEQ ID NO:2914

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03456

SEQUENCE DESCRIPTION:

GATCCTTGTT TTGTTGTCAT GGAAACTTCG GGGCTGGTGG GACTTAGGCC AAAAGCTCAG 60  
 AGGCACAGCC AAAATTTAGA AGCTTGCTAC TCCTACGACT CGGCCTATAA GGAAGAGAGA 120  
 AGCTGTCTGT ACTTTGGGGA CTACATTGCT GAAGGAAAAA AATCACTCCC TGGCTAATTA 180  
 AGATTGCTTC CAAATTGGGG GAATGTGTGT CATTTCTTTT ACCAAGGCCA GTCATCCCTG 240  
 CTTCCACCN 249

SEQ ID NO:2915

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03457

SEQUENCE DESCRIPTION:

GATCCAGGCC GGGCCTATAC AGAGGTGCTG GCTGCTTGTT TACATTCTCC TCTGGGGCTC 60  
 TACCTCTCCA CACTTCCCA GAAGGGAAAA GGGCACCCTG GATTACTNNN TTGGAAATNA 120  
 CTCCTTGGTG GGCAGCATCC TGAGGGTTCC CCAGAACCAG GCCTCTGCTC TGGCCCTCTT 180  
 GCATCTGGAA CGCCAGGTGG GTTTTNTGG CATAGGAGCC CACTTGCATT TTCATAGTTT 240  
 TATTTGATN 249

SEQ ID NO:2916

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03458

SEQUENCE DESCRIPTION:

GATCACAGCC TCCAGGGCCC CCCAAATCCC AGGGAAGGAC TTGGAGAGAA TCATGCTGTT 60  
 GCATTTAGAA CTNCTNCTT TGCACAGGAA AGAGTCACAC AATTAATCAA CATGTATATN 120  
 TCCNCTATAC ATAGAGCTCT ATTNCNCTNC GGTTTTATAA AAGCCTTGGG TTCCAACCAG 180  
 GCAGTAGATG TNCTTCTGAN CCGCAAGGNG CAAACACTGA AATAAAATAG TTTATTTTNC 240  
 ACACTCAA 249

SEQ ID NO:2917

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03459

SEQUENCE DESCRIPTION:

GATCTCCTTT TGTGAAAACC AGTTTGATGT GCTAAAAGTA AAAAGTCTAN TTTCCAGTGT 60  
 GGTCTTGTTT AGAAGCAGCC AGATTTCCTA TGTGTTTTT CCCCTCCACT CAGAAACCCC 120  
 TGCCCTTTCC CTTCAGAAAA CGATGGCAGG CATTCTCTG AGTTTACAAG CAGAGACTCA 180  
 CTCCAACCCA AACTAGCTGG GAGTTCAGAA CCCATGGTTG GAATAAAGAA ATTGTGCGTC 240  
 TTGGTCAA 249

SEQ ID NO:2918



SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03460

SEQUENCE DESCRIPTION:

GATCTATCCC TCGGNCCTCC ACACCTGAAC TTGCCTAACT AACTGGCAGG GGAGACAGGA 60  
GCCTAGCGGA NCCAGCCTGG GAGCCCAGAG GGTGGCAAGA ACAGTGGGCG TTGGGAGCCT 120  
AGCTCCTGCC ACATGGAGNC CCCTCTGCCG GTCGGGCAGC CAGCAGAGGG GGAGTAGCCA 180  
AGCTNCTTAA TCCTNAGCCT NCCCCTGTGT ATTCACCACC AATAAATCAG ACCATGAAAA 240  
CCAAA 245

SEQ ID NO:2919

SEQUENCE LENGTH:384

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03461

SEQUENCE DESCRIPTION:

GATCAGGAAA CCAGAAATAC CACATTTATG GACCATGAAN GGTGGTTCT TGA CTCTGAA 60  
GGGACTTTTG AGTTAATCAG CGTAAGGGGA TTTCTAAAGC AGGCAATCCC TG TAGCCGCA 120  
GAGAATAAAC GCCTTCCCAA AATGGNACT NCCCACAGCC ACATTCAGA CCTGCTGAGA 180  
CTGCTGAGTG AGGAATGGCA GTGAGGTTTC TTCAATNAGT CTCAGTTCTC TTAATTTTCA 240  
GGAAGAAAGG GTAATTGCAG CCCCTCAGCC CCCAGGATTG ACCTCTNGGG AGNCATGGTA 300  
GCGTTGTGTG CCAGGCCGTN GGTTCAGGTG TTNGCAGAAG CTTTCAGATT CGTCCGAAGG 360  
GAAATAAAGT GTGTTGGCGT TAAA 384

SEQ ID NO:2920

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03462

SEQUENCE DESCRIPTION:

GATCCCAGCA GCCCTCCCTT CACCGTGACC CCTGACCTTT GTTAGGAAGG TGCAGTTTTT 60  
NTTCTCAATC TAAATNCCTT TNAGGTGGGC CGCTTCCTTG GCTACCTGGT TCCAGGGGGC 120  
TGTTTTGTAA TNAGATGCTG CTGGCAGGCC ACTCAGAGGC TCCCAGCTGG GTTGGTGGGA 180  
CAGCCAGGCC AGATGACCTG ATTCCAGCAA AAATAAACT CAGATTTGGG CAAAATGAAA 240

SEQ ID NO:2921

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03463

SEQUENCE DESCRIPTION:

GATCCCTAGC AGCTCATCCT GCCCTTTGAA TACCCTCACT TTCCAGGCCT GGCTCAGAAT 60  
CTAACCTATT TATTGACTGT CCTGAGGGCC TTGAAAACAG GCCGAACCTG GAGGGCCTGG 120  
ATTTNTTTTT GGGCTGGAAT GCTGCCCTGA GGGTGGGGCT GGCTCTTACT CAGGAACTG 180

CTGTGCCCAA CCCATGGACA GGGCCAGCTG GGGCCACAT GCTGACACAG ACTCACTN 238

SEQ ID NO:2922

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03464

SEQUENCE DESCRIPTION:

GATCACCGGT TTCCGACTGA GTCTGGGGAT TTTGGCCTTG TTGACCCCTCC TAGGTGCCCT 60  
GGGAATTGCA AACAGCTTTC TGGATGAATA TCTGGACCTC AATATTGCCA AGAACTGAG 120  
GCGGCAATTC TAACTTTTTC TCTTCCCTTT AATGCTTGCA GAAGCTGTTT CCACCATGAA 180  
GGTAATATGG TATCATTTGT TAAATAAAAA TAAAGTCTTT ATTCTGTTTT TCTTGAAA 238

SEQ ID NO:2923

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03465

SEQUENCE DESCRIPTION:

GATCTACTGT GTGGTGTCTG GGCAGATGAA AGTACACTGC TTAGNGTGAT GCTTAGCATG 60  
GGGCAGATGC TTGGTAAATT GTAATCACTT TTGTTGTGAG TAAATGGAT ATTTCACTGT 120  
TGCTCTNAA ACGCTTACGG TAATATATAC TAATTATACA TGTTATTATC AGTTTATATT 180  
TATTGAACAT TTCGGGGAAG TAATTATAAA ATAATCTTGT CTACTGTCTT ACCCCAAA 238

SEQ ID NO:2924

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03466

SEQUENCE DESCRIPTION:

GATCTATGGT GCAGACTGCC TTCGTCGGGT GCAGACTGAG CGACCGNAGC CCCAGACACT 60  
ACAGCTGGAT TNCTTGATGA AAATCTTGCC AAATTACCAC CACCTAAAGA AGACTATGNA 120  
AGGAAGCTCA ACTCCAGTAA AGAACTAAGA ACAGTGTATA ACATGAAGAT AACATTTTGT 180  
CTTTGACCAC TGTCTTTTGA ATGGGCCCAC AGTGTATTAT TACTCTTAAC AACTCACAGA 240  
ATAATACATG TTCACCTTAT TTTGTAAAA TGGGTTGAGA GGAACTAAT GGAGTTTCAT 300  
TGTAACCTGC CTTNTAATT TATATAAATG TATTATTNTC CTATAAA 347

SEQ ID NO:2925

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03467

SEQUENCE DESCRIPTION:

GATCCTGTGA TATGGTTTTN GGCCAGCAA ATCTAGGAGA AGATGCAATT AAAAATTCA 60  
GAGCAAAACA TCACTGTAAT TTTGCTGTA GAAAGCTTAA ACTTCCAGGT AAAAAATTT 120

TTAATCAGTA TAGTATATAA TTNGTTACGA AACTNGGTTA CTACAATACC TCATAAGGCC 180  
AGAGGTACAA NTGTTTAATG TAATGGTCTC TAATTGTGCC AGCTTCAGCA GCTCTN 236

5 SEQ ID NO:2926  
SEQUENCE LENGTH:271  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03468  
10 SEQUENCE DESCRIPTION:  
GATCCCGCAT GCCTGAATTC ACTAAAGCCA AGGGTCTNTA AGCCACGCTN NNTCTTCTGA 60  
GACTTCCATT CCTTTCTGAT TGGCACACGT GCAGTCATG ACAATCTGTA GGATAACAAT 120  
CAGTGTGGAT TTCCACTCTT TTCAGTCCTT CATGTTAAAG ATTAGACAC CACATACAAC 180  
15 TGGTAAAGGA CGTTTCTTG AGAGTTTAA CTATATGTAA ACATTGTATA ATGATATGGA 240  
ATAAAATGCA CATTGTAGGA CATTTTCTAA A 271

20 SEQ ID NO:2927  
SEQUENCE LENGTH:235  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03469  
SEQUENCE DESCRIPTION:  
25 GATCTAAAT GTTTATTCCT TCTGTAGTGT ATTAATCTCT GTGTGTTTC TTTGGTTTTG 60  
GAGGAGGGGT ATGAAGTATC TTTGACATGG TGCCTTAGGA ATGACTGGG TTTAACAAGC 120  
TGTCTACTGG ACAATCTTAT GTTTCCAAGA GAACTAAAGC TGGAGAGACC TGACCCTTCT 180  
CTCACTTCTA AATTAATGGT AAAATAAAAT GCCTCAGCTA TGTAGCAAAG GGAAA 235

30 SEQ ID NO:2928  
SEQUENCE LENGTH:234  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03470  
35 SEQUENCE DESCRIPTION:  
GATCCATCTN CCCTCATAAA AGTGTTTCAGG TACAGCAGCT GAGGCTGCCC TGAGGAATCA 60  
NGGGGCCATT ACCAAGGGGC AGGTAAAGG TATNTAAGAG GTGGCCTTCA TGGTAGAGCT 120  
TGACCCAAGA NCTACTCCAC ATTCGGNTNG CCCAGACTGA CTCCATCCCC TGANTTTCCC 180  
40 TTNGACTTCA CCCTGTTTGT AAATAAAACA NTAAATGGA AGGTGCTNTG GAAA 234

45 SEQ ID NO:2929  
SEQUENCE LENGTH:233  
SEQUENCE TYPE:nucleic acid  
TOPOLOGY:linear  
CLONE:HUMGS03471  
SEQUENCE DESCRIPTION:  
50 GATCTCAAT CCTGGAACCC CGATTTCAAT CTACGTTCTA GTCAGTGGCC TCAAAGGACC 60  
CCACAGCACC TGGGCCAGAC CAACAGCTCG AGGGAGAACC TGAAGGCCCA GGGGGTCCAG 120

55

GGCGGACCTG GGGCCCCGAC CACCAAGGAC AGCTCAGCAG TGCCCCCTTNA CTGCATGTCC 180  
 CCAAACCTNAG CATGACTCCT GTCCTCTTCA ATAAAGACGT TTCTATGGCC AAA 233

5 SEQ ID NO:2930

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10 CLONE:HUMGS03472

SEQUENCE DESCRIPTION:

GATCAGCAGA AAGCACAAAC ACAACTGCTT CTGTATTCAG GAGGTTGTGA GTGGGCTGCG 60

GCANCCGTTG GTGCCCTGCA TAGTGGGGAT GGCTCGCAAC GTCTCTTCAT TCTGGAAAAA 120

GAAGGTTATG TGAAGATACT TACCCCTGAA GGAGAAATTT TCAAGGAGCC TTATTGGAC 180

15 ATTCACAAAC TTGTTCAAAG TGAATAAAG GTTGGCTTTT TAAATTTTAA A 231

SEQ ID NO:2931

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS03473

SEQUENCE DESCRIPTION:

GATCAGCAAA AATAAAGGGG CTACAGAAAC ACTCATTTTT ATGCTGTTCC CTCTGGGGCT 60

25 TCATGCAAA ACAATTCNT GTAAATNTAC AGTTGACTCT GATTGGAAA TATGAAAATC 120

AGTCCATCCT TGTATAAAA AATTTTTTA CAATTGTAAT TATATTGATG TTCATATTGT 180

GTAAAATAAC TCATTTAATA AAATAGTACT TTGATTACG ACATCAATAA A 231

SEQ ID NO:2932

30 SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03474

35 SEQUENCE DESCRIPTION:

GATCCCACCC CCAGCCATTT GCATTGCTGG CCCAGCGCCT GGCTTGGGGG GCGGGGAGAG 60

GCAGCAGAAG GGGCTGGGCA GGGGCGGTGG AGGACTCAGG AACTNCCCGG GGAGAGTGGG 120

TATGGCGGCT GAGCCAGGN CCCTCCTGTN TTNACTTCC CGGGATGGGT CCTTGCTTNN 180

40 AAGCTGTNTC CGACCCACC ATNTAATAAA ACCCAAAGGA ACAGCCCAA 230

SEQ ID NO:2933

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03476

SEQUENCE DESCRIPTION:

GATCAGCCGG AAACCCCTGG CAGCCAAGAA CAGATAAGGA AGGGATTGGC ATCGGCTGGC 60

50 CTTCAGCAC CTTCTCTC CAACACTTCA TTCTCTCTG CCCTGTNTCT CAAATAAACC 120

CAATGCTGCG TGTGAGGCT TTTTATTTT TCTTTTCACT CTCTTTCTAA TGCTTCCAC 180

CTTACCTTTT AGATTCTTTT GCTAGGTGGG AGATTGTTAT AAGGTCTTTA AACCATTTC 240  
 ATTTGTTTCT TTAACATTAC CAAAAGCAGG GNACAAAGCT CTTATTCAAC TCGNATTCC 300  
 ATAGNGGGCT CTGGNTTNTT CTTGAATN 328

SEQ ID NO:2934

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03477

SEQUENCE DESCRIPTION:

GATCTTGCCC GGTGTCCTGG TCCTCTTGCT TCCGTCGCGG CCGCATGTGC GTGTGTCCAA 60  
 GCAGGTCTCTG GCGGCCTCAA CTGCTGCCCC TGGTTGAATG TTCTCTTGAT AGTGCTGGAC 120  
 CCTTTGTCTA TTTNAAAGCG AATTTTGTGT GATTTCTGCT CCTTTGCGTT ATATTGTATA 180  
 ATACCAACGT AAGGAAATAA ACCTTTGGAA TTGTTGAAA 220

SEQ ID NO:2935

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03478

SEQUENCE DESCRIPTION:

GATCCGAGGG CGATGGGACA GTGCACCGCA GATAGAAGAG GAGGACGTGC AGCATGGTGG 60  
 GAAACGGGGA CACCACCTCC CAGGACGACT GTTTCAGCAA AGAGCGCANT GCTCCAGGTG 120  
 ACCCAGCAAG GCTGTTGTNT GTATGGAAGG ACACGCTCGC GGCAAGGGCA GGGCCTGGGN 180  
 AGGGTGGCCT GTCCAGTCCT NNAGACAAGG GGAGGCCTN 219

SEQ ID NO:2936

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03479

SEQUENCE DESCRIPTION:

GATCACCTGA GGTGAGGAGT TCGAGACCAG TCTGGCCAAC ATGGTGAGAC CCCATCTCTA 60  
 CTAATACTAC AAAATTAACC AGGTGTGGTG ATGCATGCCT TTNACTCGGG AGGCTGAAGC 120  
 AGAAGAATCG CTAAACTCG GGAGGCGGAG GTTGCAGTGA GTCCAGATTG TGCCATTGCA 180  
 TTCCAGCCTG GACAAGAGGA GCAACACTCT GTCTCAA 218

SEQ ID NO:2937

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03480

SEQUENCE DESCRIPTION:

GATCATGCCT GCGTGACAAA GCCTCCAGAA AAATCCTTGA AAGACAGGAC ATGGAGAGCT 60  
 GCTGGGTTGG CGAACACATC CATGTGCCGG GAGGATGGTG CACCCCAACT CCACAAGGAC 120

CCTTCCAGAC CTCACCTGT GTATNTCTTC ATCNNNTGT TCATTGTAT CCTTAAAAAT 180  
ATCCCCTGTA ATAAATCAGC AATAGTAAGT AAATAAA 218

5 SEQ ID NO:2938

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03481

10 SEQUENCE DESCRIPTION:

GATCTAAACA GTGAATAGTA CATGCAAAGG CATAGTCTAG AGGATAAAAG TGAAAATAAT 60

TAGTAGCAAA ATNAATGCCT TGTGGATGAG GTTAGGGGC CAATAACTAT CTTGAGGTAA 120

GGCCAGGTTG TGGCTGCCTT TGTGTTGTAC TAAGGGGTTT GGACCTTCCT AGGAGATTAG 180

15 AGCTTNATTA AAGTCACAAC ATCCATAAGN GAAATAAA 218

SEQ ID NO:2939

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS03482

SEQUENCE DESCRIPTION:

GATCCCTTTG CTGTGAGGGT AGAAAACCTC ACCAACTGCA CCAGTGAGGA AGAAGACTGC 60

25 GTGGATTTCAT GGGGAGCCTC ACAGCAGCCA CGCAGCAGGC TCTGGGTGGG GCTGCCGTTA 120

AGGACGTTCT TTCCTTACTG GTGCTGATAA CAACAGGGAA CCGTGCACTG TGCATTTTAA 180

GACCTGGCCT GGAATAAATA CGTTTGTCT TTCCCAA 218

SEQ ID NO:2940

30 SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03483

35 SEQUENCE DESCRIPTION:

GATCTTAGAT TTGATGAAGC ACAGTATGCA GGTAGGCCTA ATGGGGGAAG ATGGTAATAT 60

AAAAGCAAGA AGTATTTTTT TTTGNAATG NCTGAAAGCT GTTCTGTGGA TGACCTACCG 120

NTTCCTTTAA ACACGATTCT CTCACTCCA ACTCCAACT TGCTCAACTA ATCCTTAAAA 180

40 ATAAACTTGA GCTGGAATTT GAGGCTTGCC TGGAAA 216

SEQ ID NO:2941

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03484

SEQUENCE DESCRIPTION:

GATCTCGGGG GTGTGGGGCC CTGTGCCTTC CTGAAGTGCT GGCAGCCCAG TGGCACCTCC 60

50 TTCAGGCCTT TGGGGTATTC CCTAGTGTG CCCAAGTNAG CCTCATATC TGGGCGGACA 120

GCTTGTCTGG ACTTCGGAGT TGGGGTGGT CAGACACCAC AGGAGCTGTC ACCTCCTGCG 180

GATGGGCAAA TAAATTNGTG GAGGACNCCG AAA

213

SEQ ID NO:2942

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03485

SEQUENCE DESCRIPTION:

GATCCTCTCC CCTAGTATNT TCAGCACATG CTCACTGTTT TCCCCATCCT TGTCTTCCC 60

ATGTTTCATTA ATTCATATTG CCCCGGCGCT AGTCCCATTT TCACTTCCTT TGACGCTCCT 120

AGTAGTTTTG TTAAGTCTTA CCTGTAAAT TTNGCTTTTA ATTTTGATAC CTCTTTATGA 180

CTTAACAATA AAAAGGATGT ATGGTTTNA AA 212

SEQ ID NO:2943

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03486

SEQUENCE DESCRIPTION:

GATCTTTTCA GAGTGGTGT TCTAAAAGAG CATGTACAAA AGTGGCCTGT GGACATTTAG 60

GCCTAAAGTG ATGCATTINC TCTTCTNTT TGTGCAATG TATCAATGA GAGTTGCTCT 120

GTTTCTNCA ACTGTATNNA TTGCTGCATT TCTCAGCATA AACTTATCCC ATTGTATTTT 180

TNATAAATAA ATATTTTTT TGAACTTTCA AA 212

SEQ ID NO:2944

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03487

SEQUENCE DESCRIPTION:

GATCAAGGAT GAGGATTAGC ATCTGCAAAT TGAACCTCTAT CTAATTNCA TTTTTATTTC 60

TTAGAATTGT AATTAAATTT GTGTAATAA TGTNTCCAT TTCATTGTA CACTTAAAC 120

TTGGGTGACT GAAATGCAGT TAAGTGAAT NCCTTTTNTT AAAAGCAAAT GTAGATTATN 180

CAATAAAGCA GCAAACCAAT ATTAANCATA AA 212

SEQ ID NO:2945

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03488

SEQUENCE DESCRIPTION:

GATCTATGTA AAAGAATACA ATTCTTTTT ACATAATTAG TGAAATTTA TTTTTATTA 60

GGAAACACTA AATAGTGTA TATTTCTTTT GCTTTTAAAA AAATTCCTGG TAGCAAATCA 120

AGATAAATAA TTGNTTCATT TTCTTGAGCA ATACTGAAGC AGGATGAAGT AAGAGGAATG 180

CATTCATTTA AACATGCTTT GCTTGNTGAA A 211

SEQ ID NO:2946

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03489

SEQUENCE DESCRIPTION:

GATCAAAGAA CTTTCTTAT AACCTGCAAT CAGCTACTCA GCCAAAAAC AAAACAAAC 60  
 CTTGACTGCC TATGGAGGAA GACTGTGTTT GGGGGAGCTG GCATAGCTAG TGCAGAGTTC 120  
 AGATTTTCTG CTGATAATCT TTTACACCTT GGGAAAACTT TAATATCCGT ACCTGAAGGN 180  
 TGATTACCT AAAAATGTGT TAACTGAAA 209

SEQ ID NO:2947

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03490

SEQUENCE DESCRIPTION:

GATCTTCTCT GTGAATCCAC CCCTGGCTAC CCCACCCTG GCTACCCCA CGGCATCCCA 60  
 AGGCCAGGTG GGGCCTCAGC TGAGGGAAGG TACGAGCTCC CTGCTGGAGC CTGGGACCCA 120  
 TGGCACAGGC CAGGCAGCCC GGAGGCTGGG TGGGGCCTCA GTGGGGGCTG CTGCCTGACC 180  
 CCCAGCACAA TAAAAATGAA ACGTGAAA 208

SEQ ID NO:2948

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03491

SEQUENCE DESCRIPTION:

GATCACAATT NGGCCTTCAC TGCAGCGTGG TGTGGCCACC GTCCGTTTCC TCTCGGCCTT 60  
 CCTCCGAGTC CAGGTGGACT CTGTGGATGT TTGGATGTGG CCCGAGCAGG CTCAGGCGGC 120  
 CCCACTNACC NACAGCATCC GCCGCCACCC CTTGCGGTGT NAGCNCTCAA TAAAAACAAC 180  
 ACACTATAAA GTGTTTTTAA ATCCAAA 207

SEQ ID NO:2949

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03492

SEQUENCE DESCRIPTION:

GATCTGAAAA TTCTTGGAAA TTGTTCCATG TGATTAACAT GGAAGTGCCT CTAATAATC 60  
 ATTCTGAATN ATTAAATCGT TTCATTTTCT AAATGCNITA TAATGTGTTT AGCCCTTTCT 120  
 TGTTGCTGTA TGTTTAGATG CTTTCCAATC TTTTGTTACT ACTAATAATG CTATAAATA 180  
 AATATCCTTG TACTTCTTG AAA 203



SEQ ID NO:2950  
 SEQUENCE LENGTH:201  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03493  
 SEQUENCE DESCRIPTION:  
 GATCTTNTCT GTNTGGGTGG GGAGCCGGCC GGCCGTGACC CAACGGCATC CCAAGGCCAG 60  
 GTGGGCCCTC AGCTGAGGGA AGGTACGAGC TCCCTGCTGG AGCCTGGGAC CCATGGCACA 120  
 GGCCAGGCAG CCCGGAGGCT GGGTGGGGCC TCANTGGGGG CTGCTGCCTG ACCCCCAGCA 180  
 CAATAAAANT GAAACGTGAA A 201

SEQ ID NO:2951  
 SEQUENCE LENGTH:200  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03494  
 SEQUENCE DESCRIPTION:  
 GATCGTATAT GTGGGTCCCT TCCCTAGAAG AATGGTTGCT GATATGGCTA CTGCTTCTAC 60  
 ATCTNGAGTT TTTNAATTTA CTTTTTTNAC ACTGTAGCAT TGAGACTGCT TGATTCAAGT 120  
 CTGGTGCTTT GCCAGATGTA TTAATTNCCA TAAATGCTTT GTGAGTTTGG TTAATGAA 180  
 GATTCATTG GGAAANCAAA 200

SEQ ID NO:2952  
 SEQUENCE LENGTH:199  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03495  
 SEQUENCE DESCRIPTION:  
 GATCACAGCC GGAATGCAGC TGAAAGATTC CCTGGGGCCT GGTTCCAACC GCCCACTGTG 60  
 GACTCTAAGG CCTCTGCATT TGTGGGTGGT CTGNCTGTAA TATTTTGGTC ATNGGCTGGT 120  
 CTGGTCGGTT TCCCATTTGT NTGGCCAGTC TCTATGTGTC TTAATCCCTT GTCCTTCATT 180  
 AAAAGCAAAA CTAAAGAAA 199

SEQ ID NO:2953  
 SEQUENCE LENGTH:319  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03496  
 SEQUENCE DESCRIPTION:  
 GATCTCTAGT TTTNTGGTT TAATTTTNAG TAGCAGGTCA AAAACCTGCC CTCCTGTNAC 60  
 TTATTCCTG AGACTTTTCA GGAGAGCCAG CCCACAGATG ATGAAGAAAT GATGGAAGTT 120  
 CATTTGGAGA GTCAAATGGG AAAAAACAA ACAAAAACT GCCTTTAATA CAGGCAATTC 180  
 AGTGGACTAT AATAATAGTG GAGGGTTGAG ATGTAGAGTT TTTAAAAAGT GAACAGTTGC 240  
 TGTCTTACA TCTNTAANGA AAGCCATAAT GTCTTTAAAT CACTCTTCTG TAAATAGATG 300  
 NCCNTTTTGG CAGTGTAAG 319

SEQ ID NO:2954

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03497

SEQUENCE DESCRIPTION:

GATCCTTAAT GCAGAGCTAG AGGACTTCTG GCAGGGAAAGT GGGGAAGTGT TCCAGATAGC 60  
 AGGGCATGAA AACTTAGAGA GGTACAAGTG GCTGAAAATC GAGTTTTTCC TCTGTCTTTA 120  
 AATTTTATAT GGGCTTTGTT ATCTTCCACT GGAAAAGTGT AATAGCATAC ATCAATGGTG 180  
 TGTAAAGCT AAA 193

SEQ ID NO:2955

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03498

SEQUENCE DESCRIPTION:

GATCTGTTTC ATTTATAAAA GGTCCAGTTT TTAGGACTAG TACATTCCTG TTATTTTCTG 60  
 GGTTTTATCA TTTGCCTAA AATAGGATAT AAAAGGGACA AAAAATAAGT AGACTGTTTT 120  
 TATGTGTGAA TTATATTCT ACTAAATGTT TTTGTATGAC TGTGTTATAC TTGATAATAT 180  
 ATATATATAT ATN 193

SEQ ID NO:2956

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03499

SEQUENCE DESCRIPTION:

GATCCAAGAA TGTCCAAGA GTCCCGCCAG CCTCAGCCAG GTGGGCCTGT ATATAGGGTC 60  
 CATGTGCAAT AGGGAGGGAC GTCTTCTATT TTTNCTGCC CCTCCCCGC CCACTGTCTG 120  
 GGGCAGGGGG AGAAGGTATT TTCGAGATAA AGCACAGGCA CCACAAATAA AAGTCGTGAA 180  
 GTTGCCACTC AAA 193

SEQ ID NO:2957

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03500

SEQUENCE DESCRIPTION:

GATCTGGGAG CAAGCTACCA ACAGGGGAGA CTCTTTCCTG TATGGACAGC TGCTGTGGAA 60  
 ATACTGCCTG CTTCTCCAC CTNCTCANAG CCACAGGAAA GAGGAGGTGA CAGAGAGAGA 120  
 GCAAGGAAAG TAATGAGGTG GATTGATACT TTCTACTTN CATTAAAAAT ATTTTCTAGC 180  
 CTGCAGTCTA AA 192

SEQ ID NO:2958

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03501

SEQUENCE DESCRIPTION:

GATCAGCCTG GGCATCATGG TGGCCTGCAC CTGTAGTCCC AGCTACTCAG GAGGCTGAGG 60  
 TGGGAGGATA GTTTGACCCC AGAAAGTTGA GGCTGCAGTG AGCCATGAAT GCACCACTAC 120  
 ACGCCAGCCT GGATGACAGA GCGAAACCCT GTCTCAAAGT AATTAATAAT AATTATATTA 180  
 ATTCAGCAAA 190

SEQ ID NO:2959

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03502

SEQUENCE DESCRIPTION:

GATCTGCTTC CCACTGTGAC TGGGCTATGG GATTCTGACT ACCTTGCTTA CAGATTCATG 60  
 GTTTGATAAA TTTGTTGTAT TCAAAAACCTT GAAATGCAGG ACGCCATTAA GTGTCTGTTT 120  
 ATATTNTGG AATATTTGTA TTAATTACAA TTAATTAATA AAAGTGGGT TAAAAAACCT 180  
 TTCCAGGAAA 190

SEQ ID NO:2960

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03503

SEQUENCE DESCRIPTION:

GATCTTGCCC CCTTTGACCT TCCCCAAAGG ATGGTCACAC ACCAGCACTT TATACACTTC 60  
 TGGCTCACAG GAAAGTGTCT GCAGTAGGGN ACCCAGAGTC CCAGGCCCTT GGAGTTGTTT 120  
 TCGGCAGGGG CCNTNTCTCT CACTGCATTT GGTCAGGGGG GCATGAATAA AGGCTACAGG 180  
 CTCCAACNTG AAA 193

SEQ ID NO:2961

SEQUENCE LENGTH:185

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03504

SEQUENCE DESCRIPTION:

GATCAATCTG AAATATCTT AGCCCAGTCA GGGAGCTCTG CTTCTAGAA AGGCATCTTT 60  
 CGCCAGTGGA TTCGCCTCAA GGTTGAGGCC GCCATTGGAA GATGAAAAAT TGCCTCCCT 120  
 TGGTGTAGAC AAATANNAGT TCCCATGGT GTTGTGCCT ATAATAAACA CTTTTCTTT 180  
 TTAAA 185

SEQ ID NO:2962

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03505

SEQUENCE DESCRIPTION:

GATCCAACGA GGAATATTTT GCCACACGGC AAATATATAC CGTATAATTT TCTGTACCAC 60  
TTGATAGAAA GGTAAAGAAT GAATATTGTT TTTTAAATAA CTTTTTCTT ATATAAGTAA 120  
TATGTGCTTA TCGTGTAAC ACCTAAAAAC ATTGAAAAAT AAAAGGAAAA TAAAATTCAT 180  
ACATAACCAA A 191

SEQ ID NO:2963

SEQUENCE LENGTH:177

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03506

SEQUENCE DESCRIPTION:

GATCAGAAAT GGAGCATGGC CTTGTCCTTT AATGGGGATG CAAATAAAGT TTGTGGGGTT 60  
AAAAGTTATA AGACAGNAGT GATACCCAC TCTCTCCATT ATTGTCCAGC GGGGTGACAT 120  
AATGACAGGT TAAATATTG TGATTCATTG ATTAAATATT ATTTAAAGAA ATGTAAA 177

SEQ ID NO:2964

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03507

SEQUENCE DESCRIPTION:

GATCACAGNG NTGGTGTC AAATNCTATTNN AGGTTTGAAC TCTTGAGCTG GAACCTCAGC 60  
AAACTAGAGT ATATATTGTT CAGTATTCTT TTGGAAACAT TTCATTAAATG TACTTGTCTT 120  
ACAGAAATTT CTGAACTTTA GTAAAAAATAAATAAGTTAA ACTTTTAAAA CTCAAA 176

SEQ ID NO:2965

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03508

SEQUENCE DESCRIPTION:

GATCTGAACG ATGCCGTGTC CAGTTTGCGA AGTCCTATTC CCCTCCTCCT GTCGTGTGCC 60  
TTTGTTCAAG TGGGGATGTA TTTCATGTAG AAGGTGGAAG AAGGCTGCTA TNACTCTTTG 120  
GATGGGAGTC TGGCAAGAGG AAATTGGAAG ATAAATATAA TAATAAGTGA AA 172

SEQ ID NO:2966

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03509

## SEQUENCE DESCRIPTION:

GATCTGCTCT GCTGCCCTGA ACTCTTACGG CAATTAGGT TTCTCATTTT NNTTTTCTTT 60  
 TTACATATGT ACAAATTGTT TTAAGCTTTG GCCTCTATCC AGGTTATNCT GACAATGAAG 120  
 AAATGGGAGT TGTGAGAGCA TTAAGATGCA ATCTTCACTA AAANCAGTGA AA 172

SEQ ID NO:2967

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03510

## SEQUENCE DESCRIPTION:

GATCTCTAAT ACAGTATCTA ACACAAAAGA AGCTTTAAAA AGACAGTTTC TTTCCTTATT 60  
 TGATTAGCTA GAAGTTTATC TAGGTAAAAG CAAAAAATA ANTTNCAAN GCATANCATA 120  
 NCATTGGGGT TCTTTTATA CTCAAGATGT TTANCTGTTC AAANTGNCAN 172

SEQ ID NO:2968

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03511

## SEQUENCE DESCRIPTION:

GATCCAGGCG GGAGCAGAAG CTAAAGCCAA AGCCCAAGAG AGTGGCAGTG CCAGCACTGG 60  
 TGCCAGTACC AGTACCAATA ACAGTGCCAG TGCCAGTGCC AGCACCAGTG GTGGCTTCAG 120  
 TGCTGGTGCC AGCCTGACCG TCACTNTCAC ATTTGGGCTC TTCGCTGGCC TTGGTGGAGC 180  
 TGGTGCCAGC ACCANTGGCA GCTCTGGTGC CTGTGGTTTC TCCTACAAGT GAGATTTTAG 240  
 ATATTGTAA TCCTGCCAGT TTTTNTTTT TCAAGNCAGG GGTTCATNC TNAGAAAACC 300  
 CTACTCNACA CAGCACTTCT TANGGTAGGC CNCTTATTCA ANTCAATT NNAGN 355

SEQ ID NO:2969

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03512

## SEQUENCE DESCRIPTION:

GATCTCGGAT GCCATCCCG AGCTGAAGGC CTCCATCAAG AAGGGGAAG ATTCGTGAA 60  
 GACCCTGAAG TGAGCCGCTG TGACGGGTGG CCAGTTTCCT TAATTATGA AGGCATCATG 120  
 TCACTGNAAG GCCGTTGCAG NTAACTTTG TATTTNAAT TGCTTTGGTG ATGATTACTG 180  
 TTTTGACATC NTCATGCCTT CCAAATTGTG GGTGGCTCTG TGGGCGCATN ANTANAGCC 240  
 GTCCTTGATT TTGGGAAA 258

SEQ ID NO:2970

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03513

## SEQUENCE DESCRIPTION:

GATCACAAGA GGGCCATTG TAGTGGCTGG TTGACAACGG CTGGNGCAAA TTAAATAAAT 60  
 AAAATAGCTC TNTCTTTCAA A 81

5

SEQ ID NO:2971

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS03514

SEQUENCE DESCRIPTION:

GATCTNAGAC ATCCCCATCT TTGTAAGCAG AACAGTACGG CACTTCACCA CATCTNCTTC 60  
 CCACCATGCT TCTAAGCAGC TGTNTTCCCC CTGCTAATGT TACAACCAAA GCAGCCACCC 120  
 CACCTCCTNT NGTGTGAGC CTCACGACCT NTGACCCAGC TGGAAAGCN 169

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SEQ ID NO:2972

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS03515

SEQUENCE DESCRIPTION:

GATCTCATT CTGCTTTTCT TTTATGTCCT TTTGTCTCCA TGGGAGGTTG AGCTTCTTTT 60  
 CCTACAAGTT TACTTACTGT TTGCATTAC TTTTCTTTG CATTGTCTGT TCCAGTCCTC 120  
 TGGCTATTG ACTATTGTGT AATAAAAGGA CCAAAAACAA ATGTGGTN 168

25

SEQ ID NO:2973

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS03516

SEQUENCE DESCRIPTION:

GATCTTGCTG CAGCCACAGT GCAGNTCCAC ATTAAGTCTA CAGACCAAAC CATTGTATC 60  
 TGGCATCACT TACTAACACA CGNCATGCGG CTTTCTGCA TCAACTGCTA TGACGGTTAA 120  
 GANTGTCAGT ATACAAGNAG GGATAGAAAA CTGGTACTGT TTAAATAAT CTGTAATNTC 180  
 AATGTTTTT TTTTNTTTC GGAAANNCNT NGTTTGCCC GNTTN 225

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40

SEQ ID NO:2974

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45

CLONE:HUMGS03517

SEQUENCE DESCRIPTION:

GATCTTCTGT GGTGCTTAAG GNAACTTACT AGAGCTCCAC TAACAGTCTC ATAAGGAGGC 60  
 AGCCATCATA ACCATTGAAT AGCATGCAAG GGTAAGAATG AGTTTTTANC TGCTTTGTAN 120  
 GCAAATGGNA AAGGTCAATA AAGNTATATT TCTTTAGNAA ATGGGCAAA 169

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5 SEQ ID NO:2975  
 SEQUENCE LENGTH:167  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03518  
 SEQUENCE DESCRIPTION:  
 GATCCCAACT CCCATGACCT CTGGCTTCAG TGGTGGGTGG GGCAGGGCAG ATGAAAGGGC 60  
 10 TTCAGTGGGA ACCTCTGAGA GCATTTTCCT GTTCCCCCTA TCAACCGCCC CCAGTGATAA 120  
 CATCTGTGAA GCCAGCCATT ACTCAATAAA CTGCAAACCT GTCTAAA 167

15 SEQ ID NO:2976  
 SEQUENCE LENGTH:167  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03519  
 SEQUENCE DESCRIPTION:  
 GATCAGNAGC CCACTGATAA GGGGCCCTAG GGTACAGGGT GCTGCCCAGC AGGTCGCCAC 60  
 20 CGAGTGTCTT CTCATTTTAT TTCAGTCCA TTTTGGCCAT AGATGGGCAG AGGGGTGAGA 120  
 TTGGCTCATC CCCCTTCCAG ATTCTGCAAT AAAGCGGTGT GAGGAAA 167

25 SEQ ID NO:2977  
 SEQUENCE LENGTH:167  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03520  
 SEQUENCE DESCRIPTION:  
 30 GATCATTCCC TCTTTTNGGA TGTATAAGAN CCTCCGGAC AACAGAACCT ATTTNTGGAA 60  
 TTGCAGAAGA TAACATATTT CCCTTATTN NATTTAATCA CCATAAACCA TACCTATTTA 120  
 ATGAGTGTAT TCTGTGCAAT TTTTCCTCA GATTGTNTTT AACTNNN 167

35 SEQ ID NO:2978  
 SEQUENCE LENGTH:166  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03521  
 40 SEQUENCE DESCRIPTION:  
 GATCGACTGC CAAGCAGCAG CCGCTGCCGA GGGGCTGCGT CTGACATCCT GACCTCCTGG 60  
 ACTGTAGGAC TATATAAAGT ACTACTGTAG AACTGCAATT NCCATTCTTT TAAATGGGTG 120  
 AAAAATGGTA ATATAACANT ATATGATATA TAANCCTTAA ATGAAA 166

45 SEQ ID NO:2979  
 SEQUENCE LENGTH:165  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 50 CLONE:HUMGS03522

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## SEQUENCE DESCRIPTION:

5 GATCTGGGCG GGGTGGTGGC CTCCTCAGGG CGGATGCCAC CGGGTTCCCC AGGGGAATAC 60  
 ATGTCCCCAG CTCTGGGAGG GGTTTGCTAC TGGCCTCCTA CTTTCCTCCC TAGGTGGACA 120  
 GTGCTCCTCT AGAGAGCTGC GACTTTAATT AAAACAACA GGAAA 165

SEQ ID NO:2980

SEQUENCE LENGTH:165

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03523

## SEQUENCE DESCRIPTION:

15 GATCAGTGTC AGATATTGTT GAGGGAAGTA ATTTTATAAA GTTACACAAA GGTAGTTATA 60  
 AAAAAAGCCC AGTTTGT TTTT TCAGAAAGTG ACTTTNATGT GCTTGAAAAG TTAAATATTT 120  
 GANTATTGTG TTAAACCACA TGGTATTAAA ATTTTGCAAT ATAAA 165

SEQ ID NO:2981

SEQUENCE LENGTH:163

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03524

## SEQUENCE DESCRIPTION:

25 GATCATGAAA TAATGTGCTT TGTA AAAAGA TTTCAAGTTA TTAGGAAGCA TACTCTGTTT 60  
 TTNAATCATG TATAATATTC CATGATACTT TTATAGAACA ATTCTGGCTT CAGGAAAGTC 120  
 TAGAAGCAAT ATTTCTTCAA ATAAAAGGTG TTAAACTTT AAA 163

SEQ ID NO:2982

SEQUENCE LENGTH:162

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03525

## SEQUENCE DESCRIPTION:

35 GATCCGCCTG CTTGGCCTC CCAAAGTNC TGGATTATAG GTGTGAGCCA CCCTGCTCAA 60  
 CCAGGTTTNA TTATTTAANT TAGTTAACT TTGGATAGAT TGTATAATAT ATAGTTTAAT 120  
 GTAATCATGC TCATATTTT NAAATAAATA AAACACTATA AA 162

40 SEQ ID NO:2983

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03526

## SEQUENCE DESCRIPTION:

45 GATCACTTGT TGTTTACTA AAGAAAGATT ACTTAGAGGA AATAAGAAA ATCATGTTTG 60  
 CTCTCCCGGT TCTCCAGTG GTTGAGACA CTGGTTTACA CTTTATGCCG GATGTGCTTT 120  
 TCTCCAATAT CAGTGCTCGA GACACAGTGA AGCAAATTAA A 161

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SEQ ID NO:2984

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03527

SEQUENCE DESCRIPTION:

GATCTGAGGT CTAACATTGT TATCCTATAT CATTTTCATC CCAAGTAGTG ATATCTGTGA 60  
AATCACAGGT TTGATGTGTG CTAATNATGT ATTCTTCTAA TACATATTAA AAGACATAAC 120  
TATCAAAACA AAATAAATTT GTCTGTTTTT AACCAAAGAA A 161

SEQ ID NO:2985

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03528

SEQUENCE DESCRIPTION:

GATCTCCATT TGATATTTTC ATTTGTATAA CTCATTTGCA GTCTGAAAT TTTTTTAGT 60  
GCCAGTCCCT GAACATATCA TTGAAAGTTA ATTTCTTTG CATTTTAAAA TATCTGGATT 120  
ATGAAGAAAA AGTGATGAAA ATAAATTAAA ACTGAATTAA A 161

SEQ ID NO:2986

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03529

SEQUENCE DESCRIPTION:

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGGTT TGAACCGTGA 60  
ACAAAACCTGT GTTTTGAGTT TAGCTGACAT TATGAAAAA AGTTCATCAC GTGACTGTTA 120  
ATGTAAACCT GGTATTAAA ATAACNATGA AATTACCAAA 160

SEQ ID NO:2987

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03530

SEQUENCE DESCRIPTION:

GATCTCTCTG TNACTGACTT TGTGACTGTC CTGTGTTTC TCCTGCCATT GCTTTGTGTT 60  
TGGAAGGACA TGATGGGGGT GATGGACTGG AAAGAAGGTG CCAAAAGTTC CCTCTGTGTT 120  
ACTCCCATTT AGAAAATAAA CACTTTTAAA TNATAAA 157

SEQ ID NO:2988

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03531

## SEQUENCE DESCRIPTION:

GATCAAANCA CCTNGGAGTG GTCACCAGGG GGACAGGGAG CCCCCACCA ATGTATCANT 60  
 GGGTGATTTA TNATGCCCTT TGCCCTTTGG CGAGTGAATG GNTTCCCAT AGGGGAAGTT 120  
 GGCCTCCCTC CGTGAGCTTT GGAAATNTTT TCTAATN 157

SEQ ID NO:2989

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03532

## SEQUENCE DESCRIPTION:

GATCCGAATG GNTGGGTGA GCACGAATTA CCGAGGCCTT CCCTTTGNTA CAGTCCAGGA 60  
 TTTGTAAGGN ATGAAGACCC CTGGNCCCCA TTCTNTTGGG GTCCATACAT ACTCTCCGAA 120  
 GATAGCAACT TGCTTCAGGT CAAAGTNAAC CCNAGAN 157

SEQ ID NO:2990

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03533

## SEQUENCE DESCRIPTION:

GATCTCCTTA CGTAGCAGCC AAAATAAATG AAGCAAAAGA CTTGCTAGAA ACAACCACCA 60  
 AACATTGATG CTTAAGGACC AACTGGAAGG AAAAAAAG AGGGGACTTC GAAA 114

SEQ ID NO:2991

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03534

## SEQUENCE DESCRIPTION:

GATCTGATT ACAAGAAAAA GTCAGAGCTA AACACTAGTG ATGGCATAGC ATTACTGAAA 60  
 TCATTGTTT TTAATTTTCA TTTACTACAT TGTGAACTTG TGATTCAGAT TCCATTTTCT 120  
 CAGAGAATTA AAAACAAAAA AAGTACTCTT GTAAA 155

SEQ ID NO:2992

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03535

## SEQUENCE DESCRIPTION:

GATCTATTTC TNAGTATGTG GTTCATGCTG TTGTGAAAAA TGTTTACCT TTNACCTTTG 60  
 TCAGTTTGTA ATNAGAGGAT TTCCTTNAC CCTTTGTAGC TCAGAGAGCA CCTGATGTAT 120  
 CATCTCAAAC ACAATAAACA TGCTNCTGAA GGCAAA 156

SEQ ID NO:2993

SEQUENCE LENGTH:154  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03536  
 SEQUENCE DESCRIPTION:  
 GATCAAATTA GTAATTNNGT TTATGCTGCT CCTGATATAA CACTTTCAG CCTATAGCAG 60  
 AAGCACATTT TCAGACTGCA ATATAGAGAC TGTGTTTCATG TGTAAGACT GAGCAGAACT 120  
 GAAAAATTAC TTATNGGATA TNCATTCTNN NCTN 154

SEQ ID NO:2994  
 SEQUENCE LENGTH:154  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03537  
 SEQUENCE DESCRIPTION:  
 GATCTCATTT ATAATTAAAT TATGTCTATT GGATTGTTTT NATGTACTT NATGTTTTNT 60  
 NAAGAAATTG TGATTAAATA TAACTTAAAG ACTTTCTATT TTNCAGTTAT TTTAATTAGT 120  
 TACTTCATTT AANCTTTTGG CATTNCATGA TTTN 154

SEQ ID NO:2995  
 SEQUENCE LENGTH:153  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03538  
 SEQUENCE DESCRIPTION:  
 GATCATATAT GTNTTAGTGG ACAGGGGTCT GAAGTACACT GGAATTTACT GAGAACTTG 60  
 TTTGTAAAAA CTATAGTTAA TAATTATTGC ATTTCTTAC AAAAATATAT TTTGGAAAAA 120  
 TGTATACTGT CAATTAAAGT GTTTTGTGT AAA 153

SEQ ID NO:2996  
 SEQUENCE LENGTH:153  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03539  
 SEQUENCE DESCRIPTION:  
 GATCAAACATA CACATGNGTT TTCATTCCAA AAGTGGGTTC TAAANGCCTG GCTGCATCTG 60  
 TATGNAATCA AGGCACACTC CAGGAAGACT GCCGCGTCGC GCCAACACGT CATACTCAAT 120  
 GCCTCAGACT TTCATATTTT TGNNGTGCTG NNN 153

SEQ ID NO:2997  
 SEQUENCE LENGTH:152  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03540  
 SEQUENCE DESCRIPTION:

GATCCCAGCA TCTTCTCCAC TTCAGCGCTG AGTTCAGTAT ACACAAGTGT CTGCTACAGT 60  
 CGCCAAATCA CCAGTATTTG CTTATATAGC AATGAGTTT ATTTTGTTA TTTGTTTGC 120  
 AATAAAGGAT ATGAAGGTGG CTGGCTAGGA AA 152

SEQ ID NO:2998  
 SEQUENCE LENGTH:152  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03541

SEQUENCE DESCRIPTION:  
 GATCATTGG ATATAGCAAT CTACTCTGAG AAATGGAACA CAAGGAGTTA CCTATCACTT 60  
 TCACTTATAA TTCCAAAAGA TGACTACAAC CATGTCCATG CTCAGATTCA AACAGTTTTTC 120  
 CATATCACTT TTGGGTGGTA ATTACAGTTT TN 152

SEQ ID NO:2999  
 SEQUENCE LENGTH:152  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03542

SEQUENCE DESCRIPTION:  
 GATCCCTGTN TGCNCGNCCC CTCTGCAATG TATGCCCCTT GCCCCTTCCC CACACTAATA 60  
 ATTTATATAT ATAAATATCT ATATGANGCT CTTAAAAAAA CATCCCAACC AAAACCAACC 120  
 AAACAAAAAC ATCCTCACAA CTCCCCAGGA AA 152

SEQ ID NO:3000  
 SEQUENCE LENGTH:151  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03543

SEQUENCE DESCRIPTION:  
 GATCCAGAAG CAAACACAAG CAATGCAAGA CCTCCACAGA GTGAGCTTGG AGAGAGAGAA 60  
 AGCCAAGATA AGAGAGGAGT ATGANGAGAA ANTCAGAAAAG CTGGAAGATA AAGTGGAGCA 120  
 GGNAAGAGA AAGANGCAAA TGGNGANGAN N 151

SEQ ID NO:3001  
 SEQUENCE LENGTH:151  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03544

SEQUENCE DESCRIPTION:  
 GATCTGGAGA TAANTTTATG CCTTTGGCCA TAGACAGGAC TGAATCCCA GTTCTGCCAC 60  
 TTACTGGCTG TTTGACCTTA GGCAAGCCAC TCCTCCTTN TNAGCCTCAG TTTCTTTNCC 120  
 TGTAAGATAA AAAGAATGAN TCATTACTAA A 151

SEQ ID NO:3002

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03545

SEQUENCE DESCRIPTION:

GATCAGGGCT GGGGCGGGGA AACAGGGAA GGACCTTGA AGGGGCTGNN CCCAGGCCTG 60  
GGGGGCAGTC GTGGGAGCCC CTCTCANCTG TGGGGCTGGC ACAGAGCCCC AGGCAAGCTT 120  
TTAATAAACT GTTGGTTATT CTAACAGAAA 150

SEQ ID NO:3003

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03546

SEQUENCE DESCRIPTION:

GATCTCAAAA ATAGGTAATT TTTCTTTGCC GACCTGTAAA AGTGTGCCAA TACTATAAAT 60  
TTGTGATTTT AAATTAATTC CTCCAGCTGT TGAATGAAG TCTGCCAAAT CTTGCTCTAA 120  
CAATAAAAT GTTATCTAAA TGAAGTAAA 149

SEQ ID NO:3004

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03547

SEQUENCE DESCRIPTION:

GATCCTAAAA GGGAAAATTG CTTGGTAAC TTNAGATTC CTGTGGAATT GTGAATNCAT 60  
ACTAAGCTTT CTGTGCAGTC TCACCATTG CATCACTGAG GATGAACTN ACTTNGTNT 120  
TTNGGAGAAA AAAAAGTGTN CTGCTTGTN 149

SEQ ID NO:3005

SEQUENCE LENGTH:242

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03548

SEQUENCE DESCRIPTION:

GATCCTAGGA TGGCTCCCAG ACGCTCAGTC AGAAGTGCTG GAGGTGGGGC CTGGGAAGCT 60  
GTATTGTGAA TNAAGCTG NGTTTTTGT CCATTAAAGT GTATCTTGT CCATCCTATA 120  
AGNTTANNGG AAAGAAAAAG CATCTCAAAAT NAGTGTAAGT TGTCTTGAG AAAAAATGT 180  
ATCAGACTTT TATGATTGA ATGAAATGTA TTATAGNAAA ANATAAACAC NTTTAAANTA 240  
AA 242

SEQ ID NO:3006

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03549

SEQUENCE DESCRIPTION:

5 GATCCAGTTG TACTTAAGTG TGTAACAGGA ATATTTTGCA GAATATAGGT TTAAGTGAAT 60  
 GAAGCCATAT TAATAACTGC ATTTTCCTAA CTTTGAAAAA TTTTGCAAAT GTCTTAGGTG 120  
 ATTTAAATAA ATNAGTATTG GGCCTAAA 148

SEQ ID NO:3007

SEQUENCE LENGTH:148

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03550

SEQUENCE DESCRIPTION:

15 GATCATCGTG CTCTCAGACT CTGATTAGCT GCCTCCCTT CTCCTGCCT CCAGAATGTT 60  
 CTGGGATAAC ATTTGGAGGA AGGTGGGAAG CAGATGACTG AGGAAGGGAT GGACTAAGCT 120  
 AATCCCTTT TGGTGGTGT TCTTTAAA 148

SEQ ID NO:3008

20 SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03551

SEQUENCE DESCRIPTION:

25 GATCAGTCCA CCCAGAGTTA GACATTGTTT TTGTAGAAAA CAGGTATTTA TTATGTCTAG 60  
 GGTTTTGTGT TTTTTTTTTT TCCTNANAGG NTAAAAGCCT TTATACAGAA ANAATTTGGA 120  
 ACCTTNATA TAAAACCTTT TCTTTAAA 148

30 SEQ ID NO:3009

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03552

SEQUENCE DESCRIPTION:

35 GATCGCTGTG GTTCTTATTA TCAAAATTAA GTTTACTTGT ATACGGAACA ACCACAAGAA 60  
 ATTTGATTCT GTAAAGAATC CTCTTTAGCT GTGGCCTGGC AGTATATAAA TGGTGCTTTA 120  
 TTTAACAGAA TACCTGTGGA GGAATAAAG CACACTTGAT GTAAAANTAA A 171

40 SEQ ID NO:3010

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03553

SEQUENCE DESCRIPTION:

45 GATCTTTTAA TTTTGCAATC CTGGGCCAGC TAGAAGCCAG GAGCTGATTG ACCTTTTAAC 60  
 TTTTTCAGT GGCCACATTT TGGTTATCGA TGTACCTAGA AGTATGTAAA TNAGATTAAA 120  
 TTTCTCTTCT GGAAACACCC TGAAA 145

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5 SEQ ID NO:3011  
 SEQUENCE LENGTH:144  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03554  
 SEQUENCE DESCRIPTION:  
 GATCATAGAG AATGGTGCTT TTTACTACAG TTAGCACATG CATTTTLAGA AACTACTACA 60  
 10 TGTTTTAGAG AATCTTTGCT GTGTATATGT AAATGTATT GTTCAACTGT TAACAAATAA 120  
 TAAATTATTT CATTATTAAA GAAA 144

15 SEQ ID NO:3012  
 SEQUENCE LENGTH:144  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03555  
 SEQUENCE DESCRIPTION:  
 20 GATCTGCCCT NCTCCTTCTA AAGGGTAAGT CATAATCTGT GTAATACTAC AATTNATGGG 60  
 NTGCTCACTA TGCCCTGTTT CTNINCTAAA CAATTTACAT GTAATGTCTC ATTCCTCACA 120  
 ATAACCCTTG TAAAGTGGGC ANNN 144

25 SEQ ID NO:3013  
 SEQUENCE LENGTH:142  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03556  
 SEQUENCE DESCRIPTION:  
 30 GATCCCCAGC TGCCTCACTT CTCTCTTGAG AACTTGGCTC AGGGCTCCTG AGGACCTTTC 60  
 CCAGCATTAC CTTCCTTCC CTTGAAAGGC AATTGTTGGC TGTTCATATA AGCAGGAAAA 120  
 NTAAACAGAA GTATAAAGGA AA 142

35 SEQ ID NO:3014  
 SEQUENCE LENGTH:142  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
 CLONE:HUMGS03557  
 SEQUENCE DESCRIPTION:  
 40 GATCAAAATGT GCCTTAATAA ATTTNTTTC ATTTAGATT CAAACAGTGA TAGACTTGCC 60  
 ATTTAATAC ACGTCATTGG AGGGCTGCGT ATTTGTAAAT AGCCTGATGC TCATTGGAA 120  
 AAATAAACCA GTGAACAATA AA 142

45 SEQ ID NO:3015  
 SEQUENCE LENGTH:147  
 SEQUENCE TYPE:nucleic acid  
 TOPOLOGY:linear  
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CLONE:HUMGS03558

SEQUENCE DESCRIPTION:

5 GATCTAAAGA AACAGTTGGC TGTAGCTGAG GGGAAACCCC CTGAAGCCCC TAAAGGCAAG 60  
 AAGAAAAAGT AAAAGACCTT GGCTCATAGA AAGTCACTTT AATAGATAGG GACAGTAATA 120  
 AATAAATGTA CAATCTCTAT ATACAAA 147

SEQ ID NO:3016

10 SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03559

SEQUENCE DESCRIPTION:

15 GATCCCAGCA ATGAACTGTT CTAGGGAAAG TGGCTTCCTG CCCAACTGG ATGGGACACG 60  
 TGGGGAGTGG GGTGGGGGGA GCTATTCCA AGGCCCTCC CTGTTTCCCC AGCAATTAAA 120  
 ACGGACTCAT CTCTGGCAAA 140

20 SEQ ID NO:3017

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03560

25 SEQUENCE DESCRIPTION:

GATCTCAGCT TTGAGAAGCC TTCAGCTCCA GGGAAATCAA GCCTCCACAG CGAGGGCAGC 60  
 TGCTATTAT TTTCTAAAG AGAGTATTTT TATACAAACC TACCAAAATG GAATAAAAGG 120  
 CTTGANGCTG TGGCCTGAGT GCCTCACTGG AAA 153

30 SEQ ID NO:3018

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS03561

SEQUENCE DESCRIPTION:

GATCACGAAG GTGGTTTTC CAGGGCGAGG CTTATCCATT GCACTCCGGA TGTGCTGACC 60  
 CCTGCGATT CCCCAAATGT GGGAACTCG ACTGCATAAT TTGTGGTAGT GGGGGACTGC 120  
 GTTCGCGCTT TAAA 134

40 SEQ ID NO:3019

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03562

SEQUENCE DESCRIPTION:

50 GATCTATCTT NCAGAAAGTA TGTTTTTCCT CATAAAAGTG CCTCTTAATT GGCCATTGTA 60  
 CCAGCCACTT GTCCTAGCCA AATGTCCAAA ACACGCCCTT GGGCCCCGCC ACGTTACAAT 120  
 CCACANNNNN N 131

55



SEQ ID NO:3020

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03563

SEQUENCE DESCRIPTION:

GATCACTGTN ATGTGTGGTC CATCTCTGAC CAAAACGTTA TGCAGTACGT GACTGTATCC 60

TNATCCTCAA TAATCCTTGG TTATTATTCT AGAATTTCAA ATAAATGGAA TCATATCATT 120

TACTATGTAA A 131

SEQ ID NO:3021

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03564

SEQUENCE DESCRIPTION:

GATCCAGTGA ATGATTCAAG AGAGCTACAT TTGAAGCCTG TACAAAAGCT TATCCCTGTA 60

ACACATGTGC CATAATATAC AAAGTTCTAC TTTCGTCACT CCTTAACATC TACCTCTCTG 120

AATTTTCATG AATTTCTATT TCACAAGGGT AATTGTTTTA TATACACTGG CAGCAGCATA 180

CAATAAANCT TAGTATGAAA CTTTAAA 207

SEQ ID NO:3022

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03565

SEQUENCE DESCRIPTION:

GATCCTGAGA ATTACTTTTA ATAAAATCAT TTTTGTGCTG TTATTAAAC TAGNCNNGAA 60

TTGCCTAAAN CCAAGAACTC TGCTTGATAA AATAAGCATA GTNTTAGGAA CAGCCATGCA 120

GATATAANTN 130

SEQ ID NO:3023

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03566

SEQUENCE DESCRIPTION:

GATCATCGAC CCCCAAGGGA CCCGCAGACC CTAAAAAAA TCACCCACAA CCCTCTGGAA 60

GTGGCCTTGC CCGGTCCCT TCCAGGGGC GAGGTCGGCA AAGCAACATG GCAGAGCAGT 120

CATAGGAAA 129

SEQ ID NO:3024

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS03567

SEQUENCE DESCRIPTION:

5 GATCACCTTT TTTTATGC GTTGTGAATA GCAGTCTGCA TCCTAAGTTT AAAATATTTG 60  
AGAATCCTCT ATGGGACTCT CTGTAAATNT TTAAATACT GTTGTTTCA ATAAATATTT 120  
TATACTAAA 129

SEQ ID NO:3025

10 SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03568

15 SEQUENCE DESCRIPTION:

GATCAGCTGT CCTCTCTGAA AAAAATTGCA CCNNTTTTC TTTTAAAAA TTTTGTGCA 60  
TCTTCGTAGT AATGTAATTG TATTTATGC CTGCTTTTT ATAAAAAAT AAAATAAAAT 120  
AAATGGAAA 129

20 SEQ ID NO:3026

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS03569

SEQUENCE DESCRIPTION:

30 GATCTAAATN TGA CTGTGGT TGCACATATC TGTGNATATA CTA AAAACCA NTGATTTGTA 60  
CACTTTACAT GGGTGAGTTG TATGGTGTGT GAATTATATT TCAATAAAGC TGGGTTGTTT 120  
TTGTCAAN 129

SEQ ID NO:3027

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS03570

SEQUENCE DESCRIPTION:

40 GATCCCAGGA TTCAGTATTC CTGCCCCAGA GGNCNTTGCT GGCTACTGGG TGTTAGTTTG 60  
CAGTCTGTG TGTTCCCTC TCTATGACT GTGCCCTGG TTGTCAATAA AATATTCCT 120  
GGCCTCCTGG AATCNTAAA 140

SEQ ID NO:3028

SEQUENCE LENGTH:127

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03571

SEQUENCE DESCRIPTION:

50 GATCCTACGA CAGGACCCAG ATGCCAGTGA AAGTGACCAC AGCCCTGCTC TAGTCACCCC 60  
GGAAGCTGAC CAGTCTACGC ACGCCGAAG CTTCTCAAG GAAGTAAATG TAGTTAGAAA 120

55